

Open Research Online

The Open University's repository of research publications and other research outputs

Cognitive complexity revisited

Thesis

How to cite:

Watts, Jenny (1987). Cognitive complexity revisited. PhD thesis The Open University.

For guidance on citations see [FAQs](#).

© 1986 The Author



<https://creativecommons.org/licenses/by-nc-nd/4.0/>

Version: Version of Record

Link(s) to article on publisher's website:

<http://dx.doi.org/doi:10.21954/ou.ro.0001010a>

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's data [policy](#) on reuse of materials please consult the policies page.

oro.open.ac.uk

UNRESTRICTED

COGNITIVE COMPLEXITY REVISITED

by

**Jenny Watts, Cert. Ed., B.Sc. (Special) Psychology,
M.Sc. Psychology of Education.**

**A thesis submitted for the degree of
Doctor of Philosophy (Educational Technology)
of the Open University.**

Date of Submission : 16.12.86
Degree Awarded : 2.10.1987

ProQuest Number: C049030

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent on the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest C049030

Published by ProQuest LLC (2020). Copyright of the Dissertation is held by the Author.

All Rights Reserved.

This work is protected against unauthorized copying under Title 17, United States Code
Microform Edition © ProQuest LLC.

ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

DEDICATION

Dedicated

to

The Memory of my father

Charles Alfred Watts

1911-1979

who first encouraged me
to embark on this research

67, Sevenoaks Road,
Crofton Park,
LONDON.
SE4 1RF

16th December, 1986.

Mr. Martin Sullivan (Higher Degrees Officer),
The Open University,
P.O. Box 49,
MILTON KEYNES.
MK 7 6AD

Dear Mr Sullivan,

This is to confirm that I am willing for my thesis to be made available to readers at the Open University Library, and that I have no objection to sections of it being photocopied subject to the discretion of the Librarian.

Yours sincerely,

Jenny Watts

CONTENTS

Acknowledgements	i
Abstract	ii
Foreword	iii

VOLUME 1

PART ONE	Cognitive Complexity as a CONCEPTUAL Challenge	1
CHAPTER 1	A First Look at Cognitive Complexity	2
CHAPTER 2	A Selective Review of Relevant Literature	10
CHAPTER 3	A Review of the Review	34
CHAPTER 4	Cognitive Complexity Re-Conceptualised	42
PART TWO	Cognitive Complexity as a METHODOLOGICAL AND EXPERIMENTAL Challenge	119
CHAPTER 5	Some "Natural Setting" Experiments	120
CHAPTER 6	The Methodological Challenge	170
CHAPTER 7	The Experimental Data	196
CHAPTER 8	Conclusions and Further Directions	248
BIBLIOGRAPHY		256

CONTENTS

VOLUME 1

FIGURES AND TABLES

FIGURES

Figure 1	A Two-Dimensional Graph	50
Figure 2	The Process of Category and Indicator Identification	198
Figure 3	To show the Distribution of the Types of Cognitive Complexity Across All of the Subjects and All of the Topics in the '8 Topic Interview'	209

TABLES

Table 1	General Format of Protocols	134
Table 2	Topics and Prompt Questions for the '5 Topic Interview'	190
Table 3	Additional Topics and Prompt Questions for the '8 Topic Interview'	194
Table 4	Procedure for Selecting Categories	202
Table 5	Summary of Best Examples of Category Combinations	207
Table 6	Summary of Types of Cognitive Complexity and their Constituents Displayed in Best Examples	210

CONTENTS

VOLUME 2

PART THREE	Appendix. Transcripts of subjects from the '8 TOPIC INTERVIEW'	
TRANSCRIPT 1	Adrian	1
TRANSCRIPT 2	Arthur	56
TRANSCRIPT 3	Ben	79
TRANSCRIPT 4	Bertram	105
TRANSCRIPT 5	Bill	117
TRANSCRIPT 6	Dean	160
TRANSCRIPT 7	Derrick	173
TRANSCRIPT 8	Gene	214
TRANSCRIPT 9	James	236
TRANSCRIPT 10	John	272
TRANSCRIPT 11	Joss	286
TRANSCRIPT 12	Lance	316
TRANSCRIPT 13	Mark	347
TRANSCRIPT 14	Nevill	440
TRANSCRIPT 15	Peter	462
TRANSCRIPT 16	Robert	495

ACKNOWLEDGEMENTS

Many colleagues and friends, Universities and Colleges both in the U.K. and abroad, have helped me to conduct this research.

In particular, I am grateful to Dr. Colin Byrne for giving me the opportunity to carry out this research on an Open University Studentship, and to the Heinz and Anna Kroch Foundation, the Reid Trust and the Family Welfare Association, for providing small grants towards the cost of typing some of the early manuscripts. Thanks are also due to Professor Brian Lewis, who was the senior supervisor of the research up until his death in May 1986. Professor Lewis helped me to develop my ideas on cognitive complexity and advised on possible empirical work, as well as encouraging me to write research papers. My special thanks are extended to Dr Clive Lawless, who as the joint supervisor with Professor Lewis, has advised on the information processing content of the thesis, and has overseen the completion of the thesis.

I would also like to thank the numerous typists who have undertaken the typing of the transcripts, research papers and other manuscripts. I am also indebted to the Open University, Institute of Educational Technology, for arranging the final typing of the thesis.

COGNITIVE COMPLEXITY REVISITED

Jenny Watts

ABSTRACT

Cognitive Complexity is an important and obtrusive phenomenon over a wide range of situations, and is worthy of study in its own right. Although the term "Cognitive Complexity" occurs in an informal way in the psychological literature, there is no general agreement about what it means or connotes.

A new approach was needed in order to re-conceptualise cognitive complexity. This re-conceptualisation originated in the unobtrusive observation of cognitive complexity in a relatively free, uncontrolled and naturalistic environment. From this came the formulation of an appropriate and explicit methodology, which encouraged subjects to display cognitive complexity in an unhurried way in a private interview situation by talking about topics in the news and personal issues. Initial experimental techniques (including an impressionistic analysis, pen pictures and a content analysis), led on to the development of the main analysis which identified types of cognitive complexity and their constituents in the interview transcripts. The types of cognitive complexity identified were true (divided into outstanding and pedestrian), disjunctive, borderline, no cognitive complexity and secondhand cognitive complexity. The main constituents of true cognitive complexity (outstanding) were systemic and penetrating thinking, independence of thought and truth-seeking. Pedestrian cognitive complexity was characterised by analogical and investigative reasoning, clarity and incisiveness.

The importance of this re-conceptualisation of cognitive complexity is that it has resulted in the development of a new methodology which facilitates the display by subjects of more than one type of cognitive complexity. This methodology which identifies the types of cognitive complexity can be applied in real-life situations in which people are facing complex decisions.

FOREWORD

Most Ph.D's follow well-trodden research paths. Their contribution to knowledge usually consists in nothing more dramatic than the further exploration of some already-researched theme (or the exploration of some minor variation on a well-researched theme). In such cases, there may be no need for the Ph.D to have a strong conceptual content - unless, of course, the research positively demands it by calling in question certain previously-taken-for-granted conceptualisations.

For example, if I had access to a rat laboratory, and if I wanted to investigate (say) certain temporal characteristics of reinforcement schedules, the conceptual content of my thesis might well be fairly minimal. Since research workers in this area all tend to share a commonly-accepted general understanding of what reinforcement schedules are, and since they also share a similar understanding about the nature and possible significance of the temporal characteristics of reinforcement schedules, it would not be necessary for me to engage in careful explanations as to what these terms mean - providing (as I indicated above) that I proposed to "go along with" the already-existing meanings.

In this thesis, however, I am proposing to avoid well-trodden paths, to investigate a topic which is not well-researched in the psychological literature, but nevertheless, a topic which intrigues me and interests me immensely, and one which I believe is worth researching. From my reading of the psychological literature (covering the last 33 years), I noticed that the expression "Cognitive Complexity" was bandied about in a largely informal way. There was no co-ordinated research programme between researchers, and no standardisation of key terms, issues and "approaches". All of which magnified the difficulties and resistances that I encountered in trying to "fix" the meaning of cognitive complexity in my preferred way, and in the forming of a careful definition. Undeterred by these "initial" problems, I felt that the topic of

cognitive complexity was worth researching in its own right, firstly because of the challenge of re-conceptualising the phenomenon itself then of the problem of developing an appropriate methodology, and thirdly the problem of devising experimental techniques which would exemplify cognitive complexity in the way in which I construed it. Previous researchers had not recognised the need to do this, mainly because they were primarily concerned with hypothesis-testing and the analysis of correlational data. There was a need for clarification and re-conceptualisation in the area of cognitive complexity, and a need to establish cognitive complexity as an important area of research and to put cognitive complexity on the "psychological map".

PART ONE

Cognitive Complexity

as a

CONCEPTUAL

Challenge

CHAPTER 1

A FIRST LOOK AT COGNITIVE COMPLEXITY

Everyday social interaction provides endless opportunities for the display of distinctive behavioural characteristics and "qualities of mind". Some of these are much more conspicuous than others. For example, one can hardly fail to notice such things as a sharp wit, self-opinionatedness, a forceful personality, self-pity, and so on. But it may be quite difficult to detect such qualities as tenacity of purpose, loyalty, compassion, subtlety of mind, originality, etc. The trouble with these latter kinds of characteristics is that they are frequently concealed behind a quiet or self-effacing personality. They tend to reveal themselves only slowly and under special circumstances - e.g. in crisis situations, or as a result of getting to know the person concerned as a close friend.

There are yet other human characteristics which tend to be noticed only by the professionally trained eye. For example, an expert in Transactional Analysis might detect in the everyday discourse of other people a whole variety of "crossed transactions" that would escape the notice of the layman. Similarly, a professional psychotherapist might notice Oedipal conflicts that even the participants themselves were not consciously aware of.

This thesis is about a class of human characteristics and abilities whose detectability, in everyday social intercourse, is generally of "intermediate" difficulty. The characteristics and abilities in question are to do with the Cognitive Complexity that people bring to bear upon the problems that concern them. In all probability, very few people find themselves explicitly noticing the complexities (or otherwise) of the thought

processes that seem to be going on in other people. On the other hand, the evidence is there to be noticed. For example, it is certainly possible to notice that some people seem to engage in highly complicated modes of thought, whereas others seem surprisingly "simplistic" in their approach to the problems that face them. As with most human traits, there is very little difficulty in detecting people at the polar extremities of some putative scale.

However, almost as soon as we start to notice such things, the complications begin to proliferate.

1. First of all, it is obvious that Cognitive Complexity is not all "of the same kind". In my earliest reflections on the topic (some 12 years ago), a large number of possible distinctions came to mind. For example, I occasionally noticed cognitive complexity that seemed to me to be of the "dithering" kind. People who exhibited such complexity tended to talk in ways which were hedged about the "ifs and buts" and caveats in general. Such people often seemed to be ridden with doubts and misgivings, and hesitancy as well. In contrast, there were others whose cognitive complexity seemed to give them complete mastery over the problem in hand. If the problem itself was complex, their thought processes seemed to have a complexity which was ideally matched - a complexity of a kind that enabled them to tackle the problem fluently and well. Yet another kind of cognitive complexity seemed to manifest itself in the form of convolutedness, confusion, and perplexity. The thought processes of this latter kind of person were undoubtedly complex, but to no obvious purpose. What emerged always seemed to be a sort of complicated muddle.

2. In reflecting on the kinds of distinctions just made, further possibilities occurred to me. For example, it seemed to me that some cognitively complex people engage in a sort of "mental cataloguing". Whereas the cognitively simple person will tend to tackle many different problems in much the same way, the cognitively complex

person recognises that different sorts of procedures are required. However, he may try to meet this requirement by stockpiling a substantial assortment of ideas and procedures etc. which he hopes "might come in handy" in different sorts of problem situations. This method of coping is of course a poor substitute for understanding what needs to be done. The person who understands can always construct a slightly different problem solving procedure for dealing with a slightly different problem situation, because he comprehends the relevant dimensions and causation etc. of the problem that is confronting him. But the person who tries to get by with a mental catalogue of possibilities is reduced to rummaging through the list with a view to selecting some combination of ideas or procedures which (hopefully) look as if they will work.

3. In effect, the person of understanding has what might be called a generative system for coming up with appropriate ideas and solutions. The person who operates with mental catalogues does not. By way of illustration, consider the problem of multiplying one two-digit number by another two-digit number. The person who understands how to multiply has a calculative system which can generate the correct answer very easily. The person who lacks such a system can cope only by remembering in rote fashion every single product from 10×10 to 99×99 . This example is by no means far-fetched. In talking to some complicated thinkers, one gets a clear impression that they respond to novel questions and situations by mentally floundering around in a huge rag-bag of disparate facts, opinions, ideas, coping strategies, and the like. They lack the incisiveness of the complicated thinker whose complicatedness derives from his having a relevant generative system.

4. What is being mooted here is the possibility of two fundamentally different kinds of cognitive complexity. First, there is the kind of "unruly" complexity that grows out of the largely ad hoc accumulation of disparate facts, opinions, ideas, coping strategies, and so on. Secondly, there is the kind of "orderly" complexity that grows in a systematic manner, on the basis of a generative scheme whose generative principles are

well understood. As I shall later try to show, the first kind of cognitive complexity leads in the direction of CONFUSION - because the relevance and range of applicability of the assorted facts and opinions etc. tend to be inadequately understood and, in any event, there is rarely any clear basis for combining them in new ways for the purpose of dealing with new situations. In contrast, the second kind of cognitive complexity leads in the direction of CLARITY, because the generative principles involved have a cutting edge, and also have built-in safeguards against serious error.

5. At this point, an even more intriguing possibility opens up. If we are willing to envisage the possibility of cognitive complexity being based on a small number of generative principles (e.g. in the way that the whole edifice of number theory, in arithmetic, can be developed out of just a few basic axioms), we can see that some kinds of complexity are actually made up of nothing more than a lot of simplicity. There is a sense in which this is undoubtedly true of much of modern technology. At first glance, it might seem an enormously complex task to land a man on the moon. But the fact is that each component step in the venture was not inherently complex to the specialist who planned it. The precision engineering, for example, would have been a comparatively straightforward matter to the expert who knew what he was doing. The complex procedures of assembly and coordination would likewise seem much less complex to the experts concerned. The key point to be noticed is that the seemingly-complex tools and procedures for getting a man to the moon were fabricated/compounded out of simpler tools and procedures - and these latter were themselves fabricated/compounded out of even simpler tools and procedures. The overall enterprise may well look dramatically complicated to the layman. But there is an important sense in which it ultimately consisted in nothing more than a lot of simplicity. In saying this, we are not in any way belittling the moon project. We are merely wanting to suggest that technological complexity is intelligible if and only if it can be seen to be constructed, in this sort of way, out of what I describe as "a lot of simplicity". Complex ventures can in fact be relied upon to succeed only if they are always constituted out of

simpler components, and in accordance with principles that are simple enough to be well understood. It is this generative basis of simplicity which guarantees the achievement of complicated-looking results.

6. The foregoing arguments would seem to have significant implications for those theorists who tend to assume that cognitive complexity (or, for that matter, complexity in general) is basically "a good thing". There are many biologists, for example, who seem to regard Evolution as being almost synonymous with Complexification - or, at the very least, synonymous with a certain kind of adaptive complexification. They start by describing the amoeba as the simplest of creatures, and Man as the most complex or (almost synonymously again) the most evolved. This naturally encourages the idea that complexity has some special survival value. A rather similar argument begins by asserting that the world is a very complicated place and, in order to maximise our chances of survival, we need to be able to think in appropriately complex ways. It takes complexity of thought, so the argument goes, to master the complexity of the modern world. These arguments are all somewhat dubious, but they will be considered later. For the moment, I only wish to point out that there might, after all, be something to be said in favour of an appropriate kind of cognitive simplicity. In the domain of interpersonal relations, the major religions of the world have almost all extolled the virtues of being simple and straightforward in one's dealings with other people. And, even in the domain of modern technology, we can now glimpse the possible advantages of starting from a simple generative base.

7. It is of some interest to speculate that, corresponding to what I have described as two kinds of cognitive complexity, there may in fact be two comparable kinds of cognitive simplicity. First, there is the kind of person who is simplistic in the sense that he adheres to just a small number of simple-minded slogans or belief systems. Such a person is very much like the cognitively complex "cataloguer". He also operates with an ad hoc (and hence arbitrary) assortment of guiding ideas, principles etc. The

only difference is that his catalogue of possibilities happens to be much smaller in size. Being smaller in number, the ideas and principles in question are generally easier to identify and (hence) easier both to attack and defend. The religious fundamentalist, the naive Marxist, and the dedicated "do-gooder", often (but by no means always) fall into this category. To such people, the world and its problems can look surprisingly simple. Among other things, they firmly believe that if certain kinds of action were to be taken (namely, actions that accord with their own taken-for-granted assumptions), the major problems of mankind would dissolve.

Perhaps it need hardly be said that I am not advocating that kind of cognitive simplicity. What I am broaching is the more radical possibility that there may be a quite different kind of cognitive simplicity - the kind that would enable people to see things as they are, rather than through the distorting blinkers of some dogmatic belief system. This possibility is sometimes described, in the religious and mystical literature, as "seeing true". What is being suggested is that, if only we had the eyes to see it, we would recognise that the principles governing the world and human nature are basically very simple in form - and that the apparent complexity that we see all around us is indeed made up of nothing more than a lot of simplicity. This suggestion is obviously a contentious one. But it at least raises the possibility of their being a way of coping with (and understanding) the world that is both essentially simple and correct. As a matter of fact, Dennis Skinner comes quite close to espousing this view. On a totally different plane, so also do Christ and the Buddha.

8. Here, then, is a fairly rich budget of questions that might usefully be raised about the phenomenon of cognitive complexity. Enough has been said, perhaps, to show that cognitive complexity is by no means the same as 'intelligence'. It is not the same as 'creativity' either. On the other hand, certain kinds of cognitively complex person do come up, from time to time, with ideas that seem to be strikingly intelligent and creative - but they do not necessarily do this in any dramatic or "sparkling" way. It

is more often the case that such people come across as possessing "subtlety of mind". However, this leads to yet another problem, the problem of being able to recognise and appreciate such subtlety when it is present. The trouble is that a subtle thinker can usually be recognised and appreciated only by another thinker who is no less subtle. As the popular saying goes, "It takes one to know one". There have been several occasions, in recent years, where I have initially tended to dismiss a cognitively complex thinker as being confused and confusing - only to realise later that I had simply not appreciated the subtlety and power of his thinking. This is a chastening experience, and one that poses real problems for investigators who are wanting to investigate the phenomenon.

* * *

In the previous 8 sections, I have indicated some of the early thoughts that I personally had on the topic of cognitive complexity, when I first started to get interested in it some 12 years ago. The reader who is conversant with the professional literature on cognitive complexity will no doubt recognise that what I have said so far bears very little resemblance to what the professional literature has to say. This is no accident. When I first started to get interested in cognitive complexity as a phenomenon, I deliberately ignored the already existing literature. I wanted to develop my own thoughts on the topic before doing a systematic literature search. In this way, I could be sure of having an independent "yardstick" against which to assess what I read.

When I did eventually get around to studying the professional literature on cognitive complexity, I was frankly astonished at the difference between my own approach and that of previous investigators. It was almost as if others were talking about something entirely different. In some respects, the differences were somewhat alarming. But in other respects it seemed to me to be "good news" that I appeared to have something different and hopefully worthwhile to say. It is therefore appropriate, at

this point, to take a look at what the professional literature on cognitive complexity does say. After that, I will lay out my own analyses in more detail.

CHAPTER 2

A SELECTIVE REVIEW OF RELEVANT LITERATURE

Introductory Remarks

In the psychological sciences as a whole, there are numerous topics that are universally recognised as being worthy of study in their own right. The topics of learning, intelligence, creativity, motivation (and many more) obviously fall into this category. Indeed, the topic of learning has been researched so extensively that entirely different "schools of thought" have developed, each school having its own supporting literature of textbooks, monographs, readers, journals, etc. The four schools that most readily come to mind are the behaviourist, the cognitivist, the psychoanalytic, and the phenomenological. Alternative categorisations (humanistic, developmental, physiological, etc.) exist. And it additionally needs to be noticed that several disciplines outside of what is generally regarded as "psychology" - e.g. ethology, cybernetics, bionics, general systems theory, and artificial intelligence - have also made distinctive contributions to our understanding of learning. What characterises the study of a major topic like learning is the widespread coordination of effort, the huge amount of literature produced, and (within any given school) the progressive standardisation of key terms.

In contrast to all this, the topic of cognitive complexity has seldom been regarded as worthy of study in its own right. Whereas the origins of work on learning, intelligence, creativity, and so on, tend to be almost lost in the mists of time, the origins of work on cognitive complexity can be traced back, fairly uncontentiously, to a provocative initiating paper published by Frank Barron in 1953. Unlike what happened in the case of learning theory, however, Barron's paper did not precipitate any great

bandwagon effect. In the 33 years that have passed since its publication, systematic research on cognitive complexity has been scant and intermittent and (partly for these reasons) largely idiosyncratic. There has been no widely-coordinated research effort and, hence, almost no standardisation of key terms, issues, and "approaches". And, whereas the number of significant papers on (say) learning theory must by now run into many thousands, the number of significant papers on cognitive complexity (i.e. papers that really try to ask searching questions about the origins and nature and consequences of the phenomenon) have not averaged out at more than 1 - 2 per year.

There is however one particularly interesting characteristic of cognitive complexity as a phenomenon. It is the sort of phenomenon that regularly and almost inevitably intrudes itself upon the consciousness of all thoughtful people. The reason is not difficult to see. The fact is that, whenever a person is confronted with some seemingly-complicated intellectual challenge, it will almost always occur to that person to wonder whether his cognitive processes are capable of coping with the complexity involved.

In the case of a researcher conducting a psychological experiment on other people, there is actually the dual question of (a) whether he might be setting himself a task which is, in certain respects, "too complicated" for him, and (b) whether he might also be setting his subjects a task which is, in certain respects, too complicated for them. Occasionally, there will be experimental situations in which problems to do with the complexity of a subject's cognitive processes will be particularly obtrusive. For example, this could happen if an experimenter has to give rather complicated orientating instructions to his subjects. Or it could happen if certain questionnaire items are particularly taxing. More generally, it could happen whenever the experimental task could pose "tricky" conceptual problems. In all such cases, the honest experimenter will feel obliged to do something about the matter. Minimally, he will feel obliged to point out in his write-up that the cognitive complexity of certain subjects might have been a

relevant (e.g. disturbing) factor in their performance. He may additionally choose to appraise results in the light of what the literature on cognitive complexity (meagre though it is) has to say. He might even try to make specific allowances for the cognitive complexity factor in his experimental design. Notice, however, that in all these cases, cognitive complexity will not necessarily be the experimenter's main focus of concern. It is rather the case that, for the experimenter in question, cognitive complexity has cropped up, uninvited, as a sort of non-ignorable "nuisance" factor. It is something that the experimenter feels obliged to take heed of, while he is studying other things.

It might be said that cognitive complexity is an all-pervasive but seldom- studied factor in the intellectual affairs of Man. In the course of trying to achieve any significant goal at all, a person can hardly fail to contemplate, quite early on, the complexity of the task that he has undertaken. At this point, however, his attention is likely to be directed towards analysing the task, with a view to seeing how he might "cut through" the complexity that confronts him, so as to bring a satisfactory solution within his reach. The trouble is that, if he always proceeds in this way, he can go through life without ever asking any deeper questions about the nature of complexity, per se, or about the nature of the complexity-reducing thought processes that he habitually tries to engage in.

Cognitive complexity therefore has a somewhat anomalous status in the professional literature of psychology. On the one hand, there is the undeniable fact that it has never been subjected to widespread and coordinated investigation. On the other hand, it is equally clear that cognitive complexity is likely to be an important and obtrusive "consideration" over a wide range of situations. Whenever there is reason to believe that the complexity of some experimental task might be too great for some subjects to handle, there is always the possibility that the experimental data will be adversely influenced or contaminated by "the cognitive complexity factor". And whenever we wish to theorise about the conditions under which people are able to meet difficult intellectual challenges, cognitive complexity is again a factor that must be

reckoned with.

How, then, do professional psychologists manage to go on ignoring a factor like cognitive complexity when, in certain important respects, it is obviously not ignorable? The short (and by no means complete) answer to this question is that they try to make provision for the factor in roundabout ways. For example, psychologists often use large random samples in the hope that the influence of unwanted (and possibly contaminating) factors will be roughly "balanced out" in each of their comparison groups. And, if the experimental task happens to present difficulties of a cognitive (rather than, say, an emotive) kind, they might explicitly try to control for intelligence in the hope that this will also help to nullify the effects of differential cognitive complexity. In the last resort, they would probably seek to claim that the factor of cognitive complexity is unlikely to be important or intrusive enough to cause any significant distortion in their results. And they would make this claim without really knowing whether it was right or wrong.

These are important considerations. If we wish to argue for the importance of some largely-neglected phenomenon, we are under some obligation to explain how professional psychologists have so far managed to get by without it. However, we can now see that devices (for the ignoring of relevant phenomena) do exist. And one such device is that of claiming that the phenomenon in question is "adequately covered" in alternative ways. The situation is rather similar to that which obtains in the field of personality types. There are now so many typologies in existence that it is hard to believe that any more are called for. So, whenever some new typology is proposed, critics and cynics will invariably tend to think that it is probably redundant.

In the case of cognitive complexity, it is not difficult to see how this phenomenon might seem to be "adequately covered" by some combination of phenomena which go under different names. It is fairly obvious, for example, that a

discussion of discrimination learning is, at least in part, a discussion of part of the process of cognitive complexification. To acquire new discriminations is to notice more things and (hence) to increase the complexity of one's cognitive processes. More generally, all developmental theories - Piaget's theory of cognitive growth, Kohlberg's (derivative) theory of moral development, assorted behaviourist and psychoanalytic theories of child development and socialisation - span part of what might be meant by "cognitive complexity". Other aspects of the phenomenon can no doubt be culled from other sources. For example, anxiety is probably one powerful potentiator of cognitive complexity. A person who is anxious typically casts around for new ways of doing things and/or avoiding trouble. The person who perceives himself as being creative will do the same. In both cases, new possibilities get explored, and cognitive processes undergo a corresponding increase in complexity.

Theoretical psychology is manifestly constituted out of conceptual schemes and categories that overlap. This point has already been made in connection with personality types. It could equally-well be illustrated with reference to attitudes, prejudices, values, ethnic aggression, beliefs, and the like, or with reference to conditioning, learning, concept formation, and so on. Cognitive complexity is no different, in this respect, from any other psychological construct. Psychologists explicitly acknowledge these multiple overlaps when they look for correlations among the various phenomena to which their concepts or constructs refer. In so doing, they frequently find themselves having to review two kinds of literature - literature to do with the topic in which they are primarily interested, and literature to do with a whole assortment of topics which might be related to their primary topic.

In the literature review that now follows, I shall make no attempt to follow this dual course. For the purpose of this thesis, it would be too much of a digression to try to review even a small proportion of the innumerable papers that might be said to "have something to do with" cognitive complexity. Instead, I shall focus solely on those

papers (comparatively few in number) that address the topic of cognitive complexity directly. Since the study of cognitive complexity has itself complexified over the past 33 years, it is convenient to begin with the pioneering paper that the American psychologist, Frank Barron, produced back in 1953.

The Frank Barron (1953) Paper

As indicated earlier, interest in the phenomenon of cognitive complexity did not really begin to "take off" until the publication of Barron's (1953) paper on the subject. The Barron paper was called "Complexity - Simplicity as a Personality Dimension". So far as I have been able to discover, no prior paper even begins to consider cognitive complexity as a phenomenon that might be worth studying in its own right. Barron himself tentatively identified complexity-simplicity as a bipolar factor "which seems to have considerable generality in human behaviour". He acknowledges that a few earlier researchers - notably Eysenck (1941a, b) and Welsh (1949) - had stumbled across a rather similar-looking factor in their own work. But Eysenck had cautiously described his factor as "the K Factor". And Welsh (1949) had spoken of a symmetry-asymmetry factor.

In their different ways, Eysenck and Welsh had both noticed that, when subjects were presented with a variety of different stimuli (colour patterns, odours, paintings, geometric shapes, etc.), some of them showed a preference for "the obvious", whereas others showed a preference for "the non-obvious". For example, some subjects expressed a liking for simple patterns of colours, strong and obvious odours, nice symmetrical paintings and shapes, etc. But other subjects expressed a greater liking for more complicated patterns of colours, more subtle odours, more irregular paintings and shapes, etc. We can obviously see here the glimmerings of a possibly-deeper distinction - e.g. between subjects who are attracted by simplicity, and subjects who are attracted by complexity. Barron's achievement was to make this possibility explicit, thereby

elevating "complexity-simplicity" to the status of a phenomenon that might be worthy of further study.

It needs to be noticed, however, that the general focus and content of the Barron (1953) paper was by no means typical of later work in the area. In the first place, Barron's original work was located, fairly precisely, in the comparatively narrow field of aesthetic judgement. What primarily interested him was the phenomenon of perceptual choice. Like Eysenck and Welsh before him, he was intrigued by the fact that, when presented with stimulus configurations of varying complexity, some subjects express a preference for the more simple and more obvious features of such configurations, whereas others express a preference for the more complex and more subtle features. This is plainly not a direct enquiry into the complexity or otherwise of the subject's thought processes. Rather, it is an enquiry into what people notice, and what they find attractive. There is however a link. If we discover that some subjects regularly seem to perceive (and be attracted by) the less obvious features of a stimulus situation - if, for example, they regularly show a preference for intricacies and subtleties and complexities that appear to "leave other subjects cold" - then it surely is reasonable to conjecture that the former subjects do tend to see the world in more complex terms.

Actually, Barron collaborated with Welsh in the development of the so-called Barron-Welsh Art Scale. See Barron & Welsh (1952). Although this paper pre-dates Barron (1953) by a year, it did not explicitly deal with complexity-simplicity as such. However, it was reconstructed in this way in the Barron (1953) paper. In his analysis of the ways in which professional artists compared (on the test scale) with other subjects, he says:

"... artists liked figures which were highly complex, asymmetrical, free-hand rather than ruled, and rather restless and moving in their general effect. (Several artists, in reacting to them, had described them as "organic".) The figures which were liked by people in general, however, were relatively simple, often bilaterally symmetrical, and regularly predictable, following some cardinal principle

which could be educed at a glance. These figures were described by artists as "static", "dull", "uninteresting"..."

In pursuit of his hunch about the existence of an underlying complexity-simplicity dimension, Barron then devised a further Painting Preference Test of his own. He then checked both tests out, via correlational methods, (a) against each other, and (b) against the Gough Adjective Check-List (Gough, 1950). The result of these further enquiries was to identify two model types of person - the cognitively simple, and the cognitively complex. The two types are briefly characterised by Barron, in his 1953 paper, in the following way:

"Cognitively Simple"	"Cognitively Complex"
<p>In Figure Preferences</p> <p>Preferring what is simple, regularly predictable, following some cardinal principle which can be educed at a glance.</p>	<p>In Figure Preferences</p> <p>Preferring what is complex, irregular, whimsical.</p>
<p>In Art Preferences</p> <p>Preferring themes involving religion, authority, aristocracy, and tradition.</p>	<p>In Art Preferences</p> <p>Preferring what is radically experimental, sensational,sensual, esoteric, primitive, and naive.</p>
<p>In Adjective Self-Checks</p> <p>Contented, gentle, conservative, patient, peaceable, serious, individualistic, stable, worrying, timid, thrifty, dreamy, deliberate, moderate, modest, responsible, foresighted, conscientious.</p>	<p>In Adjective Self-Checks</p> <p>Gloomy, pessimistic, bitter, dissatisfied, emotional, pleasure-seeking, unstable, cool, irritable, aloof, sarcastic, spendthrift, distractible, demanding, indifferent, anxious, opinionated, temperamental, quick.</p>

The remainder of Barron's paper is mainly given over to intelligent and interesting speculation. Among other things, Barron suggests that the complex person might be more intensely expressive, expansive, and fluent in speech than the simple person. This simple person, however, is seen as being more natural and likeable, and also as more

straightforward and lacking in duplicity. To some extent, the simple person seems to be better adjusted to his environment but, as Barron rightly observes, this may not be an unmixed blessing.

"... the unadjusted complex person, who does not fit in very well in the world as it is, sometimes perceives the world more accurately than does his better-adjusted fellows..." (Barron, 1953)

In making comments of this kind, Barron sometimes appeals to assorted correlations and staff ratings that purport to back up what he says. He also makes references to psychoanalytic theory. One of his conjectures is that early oral deprivation, leading to lack of infantile trust, can lead to adult "duplicity and craftiness". Since clinical evidence generally suggests that oral fixation can lead to feminine character traits, there is a further conjecture that complexity measures will correlate with masculinity-femininity measures. In the light of these considerations, yet another conjecture (partially validated by Barron via the MMPI test) is that:

"...Sentience (seeking and enjoying sensuous impressions, sensitive, aesthetic) and Sensuality (acceptance of an capacity for sensual gratification) are both related positively to Complexity (correlations, via MMPI of .25 and .26 respectively). This completes a picture of low but consistent correlations of Complexity with some of the derivatives of orality..."

By a similar reasoning process, Barron argues that the cognitively complex person probably exhibits somewhat slower social development in the earlier years of life.

"...The argument would be that this primitive experience of phenomenal complexity sets a pattern of response which results in slower maturation, more tentativeness about the final form of organisation, a resistance to early crystallization of the personality, and finally, greater complexity in one's view both of the outer and of the inner worlds..."

From this, it follows that originality and artistic creativeness might also be related to the preference for complexity. In addition, it can be argued that the cognitively

complex person is likely to exhibit less self-control, a greater breadth of consciousness, a greater tolerance of anxiety and ambiguity, a greater degree of social non-conformity, and a greater confidence in one's own views (in situations where these seem to be at variance with the conventional wisdom).

Finally, Barron lists a number of caveats and reservations about what he describes as certain "discrepant" findings. Most important of these is the one which calls attention to the way in which correlated relationships can vary with different samples. For example:

"... the negative relations of Complexity to Naturalness, Likeability, and Adjustment become zero order in both the medical and graduate student samples. In addition, the positive relationship with Deceitfulness disappears, being slightly negative in the second sample of graduate students and exactly zero in the medical sample.

... several relationships which were zero in the first California sample because significantly positive in both the the succeeding samples. Complexity shows correlations with intellect of .42 and .41; with Breadth of Interest of .33 and .39; with Sense of Humour of .39 and .33; with Cathexis of Intellectual Activity of .42 and .29. (The correlations in the graduate school sample are given first, those in the medical sample second.)..."

Comment

The Barron paper is in many respects an outstanding example of its kind. It brings to the notice of psychologists a factor that had hitherto been neglected. It generally makes out a case for the need to study the factor further - e.g. by calling attention to its possible relevance over a very wide range of behavioural situations. In effect, Barron manages to convey nothing less than a panoramic view of the manner in which cognitive complexity might come into existence in early infancy, and subsequently influence one's entire life style. The overall sweep of the paper is very impressive indeed. If creativity and breadth of vision are (as Barron conjectured) "correlates" of cognitive complexity, he certainly exhibits the first two traits in his own writing.

A question that is worth asking, however, is whether Barron also comes across as being "cognitively complex" in his own 1953 paper. As the reader is likely to know, Barron later went on to become one of the leading researchers in the field of Creativity Research. But there is a stark simplicity about the way in which he subsequently defined creativity (cf. Barron, 1969) as "the ability to bring something new into existence". In his 1953 paper, the same sort of simplicity seems to be shining through. It is as if he has been through a great deal of complicated thinking in order to arrive at hard-won but essentially simple conclusions. In this respect, he differs from those contemporaries who appear to go through a great deal of complicated thinking only to arrive at very complicated conclusions. As mooted in chapter 1, the difference is between the kind of cognitive complexity that veers towards CLARITY, and the kind of cognitive complexity that veers towards CONFUSION. If Barron is to be regarded as cognitively complex, his complexity would seem to be of the former "clarificatory" kind.

With regard to the actual content of Barron's (1953) paper, there would seem to be only one curious anomaly. This is to do with his very first finding, in which he asserts that professional artists exhibit greater complexity (in their perceptual preferences) than do "people in general". It is of course entirely lacking in credibility to suppose that artists are in general more cognitively complex than the rest of the human race. No doubt they generally do have a more complex judgemental basis for assessing works of art. But if that is the finding, it would suggest that cognitive complexity is essentially a "situation specific" trait. In other words, it would suggest that artists are cognitively more complex in matters to do with art and aesthetic judgment, whereas engineers (to take a random example) would no doubt prove to be cognitively more complex in matters to do with engineering. Such a conclusion would seriously undermine Barron's conjecture that complexity-simplicity is a general (rather than a situation-specific) trait. As we shall see, later workers in the field did indeed challenge Barron on this very point.

The Psychological Literature as a Whole

If we now turn to the rest of the psychological literature on cognitive complexity, we can only marvel, retrospectively, at the prescience that Barron showed in his 1953 paper. To a very large extent, the work and literature that post-date 1953 consist of very little more than the pursuit, in a variety of different contexts and using a variety of different measures, of the various "hares" that Barron started.

From time to time, new ideas have been introduced. For example, Bieri (1955, and later) introduced the notion of multivariate information processing, as a major consideration in the systematic study of cognitive complexity. This duly led him to invoke techniques developed by Kelly (1955) for assessing (among other things) the "dimensionality" of personal constructs. It also enabled him to make use of a variety of multi-dimensional scaling techniques. On a somewhat different track, Scott (1963) focussed on certain general characteristics of cognitive structure - characteristics such as differentiation, relatedness, and integration - because he felt that this was a precondition for being able to compare, in a cogent manner, one cognitive structure with another. A useful exposition of these developments can be found, in summary form, in Warr (1970).

Overall, however, it is difficult to support the contention that "good progress" has been made in the area. The literature on cognitive complexity is very slender indeed, in comparison with the literature on, for example, learning. And this needs to be said, because there are certain papers which give a contrary impression. For example, a well-regarded paper by Vannoy (1965) opens in the following way:

"...Considerable recent literature (Barron, 1953); Berkowitz, 1957; Bieri, 1955; Ehart, 1957; Higgins, 1959; Leventhal, 1957; Lundy & Berkowitz, 1957; Mayo &

Crockett, 1964; Plotnick, 1961; Scott, 1962, 1963; Sechrist & Jackson, 1961; Ware, 1958; Zajonc, 1960) has dealt with cognitive complexity as a variable which influences people's perceptions and evaluations of events..."

The citation of 14 different references (three of which are, by the way, unpublished doctoral dissertations) suggests the existence of a flourishing field of enquiry. The truth is, however, that the papers cited by Vannoy are just about the only significant papers that existed on the subject, prior to 1965. His 14 citations therefore represent almost the sum total of 12 years' work in the area.

Since the time of the Vannoy publication, things have not changed very much. Over 30 years have gone by since the appearance of Barron's 1953 paper. But, as indicated earlier, it would be difficult to find as many as 30-60 worthwhile publications in the area. In recognition of this fact, it will be sufficient (for the purposes of this thesis) to end this chapter with what might be called "a quick round-up" of the relevant literature that does exist. For the sake of completeness and comparison, my review will begin (again) with Barron's 1953 paper. This time, however, it will be couched in the quasi-technical language that researchers in this field habitually use, when they are trying to summarise the work of other people. In the chapter that follows, I will take a closer look at what the literature means, as a prelude to presenting my own independent view.

A Brief Overview of Relevant Literature

As already indicated, Barron (1953) - like most subsequent workers - investigated "complexity - simplicity" as a possibly ubiquitous and influential personality dimension. His findings described the correlates of a bipolar factor in perceptual preferences, in which a preference for perceiving and dealing with 'complexity' was opposed to a preference for perceiving and dealing with 'simplicity', when both of these alternatives are phenomenally present and a choice has to be made between them. Barron conjectured that these correlates pervade many areas of human

behaviour and attitudes. For example, innerpersonal psychodynamics, interpersonal relations and social spheres of behaviour such as politics, religion and group interaction. These types have both their effective and ineffective aspects with respect to human functioning. On some occasions the simple approach is highly appropriate, whilst at other times an awareness of greater phenomenal richness is called for.

Barron called this factor 'Complexity', and noted its relationship to the following correlates. It is related positively to personal tempo, verbal fluency, impulsiveness and expansiveness. But it is related negatively (in one sample) to naturalness, likeability, lack of deceitfulness, adjustment and abundance values. Positive correlations were found to originality, good taste and artistic expression. In its revised form (i.e. Complexity) in two other samples significant positive correlations were found with intellect, sense of humour, breadth of interest and cathexis of intellectual activity. In the areas of sensuality, sentience, aesthetic interest, effeminacy and femininity in men, it is related positively, but it is related negatively to rigidity and constriction. Further negative correlations were found to control of impulse, of impulse by repression (but positively to expression of impulse and to breakdown of repression), and to political-economic conservatism, to subservience to authority, to ethnocentrism and to social conformity. In Barron's findings, Complexity is also related positively to independence of judgement.

Bieri (1955) investigated cognitive complexity-simplicity and predictive behaviour with special reference to the way in which people see one another. In his approach predictive behaviour (in dealing with others) is conceived as a function of an individual's perception of others. (These data are perhaps more usually considered under the label of social perception, empathy, or social sensitivity.) Bieri takes the view that all these forms of behaviour rest operationally upon the predictive behaviour of the individual. Also, this predictive behaviour is assumed to be dependent upon the interpersonal discriminations or constructs (cf. Kelly's 1955 theory of personality),

which the individual invokes in making his predictions. The complexity of an individual's cognitive system relative to the degree of differentiation among his perception of others should thus influence his predictive behaviour. For Bieri, differentiation was something that could best be measured by recourse to multivariate information processing and multidimensional scaling methods.

Bieri thus conceptualised a cognitively complex structure (as applied to persons) as "a system of constructs which differentiates highly among persons.... (whereas) a construct system which provides poor differentiation among persons is considered to be cognitively simple in structure". These pioneering yet somewhat crude characterisations of cognitive complexity- simplicity were incorporated into Bieri's research in which he found that cognitive complexity relates especially to the tendency to predict accurately the differences between oneself and others. He also found that the tendency to engage in inaccurate projections concerning the similarity between self and others related significantly to cognitive simplicity. Bieri concluded that the complexity of one's cognitive system for perceiving others is effectively related to an individual's ability to predict accurately the behaviour of others, and to an individual's tendency to engage in assimilative projection in such behaviour.

Other research in the interpersonal domain was done by Leventhal (1957), who investigated cognitive processes and interpersonal predictions. In it he studied experimentally a set of interrelated variables thought to influence predictive accuracy. A model treating social perception as an example of concept formation suggested the combined manipulation of stimulus and individual difference variables. Leventhal expected that judges possessing a number of differentiable concepts regarding others (Complex Judges), would be better predictors than judges having undifferentiated interpersonal constructs (Simple Judges). It was hypothesised that given more information about a person, judges would predict better, and that Complex Judges would best utilise full information. The scores obtained on the Kelly Role Repertory test

were used to define the dimension of conceptual simplicity-complexity. The information in the experiment was presented by means of recorded interviews, each type of judge judging each type of interviewee, and judgements were made on the basis of two different amounts of information.

The results from Leventhal's experiment showed that although Simple and Complex Judges were about equal in predictive accuracy, they differed in the ways in which this accuracy was achieved. Simple Judges tended to assume similarity between themselves and others, while Complex Judges tended to differentiate between themselves and others. Also, the increase in accuracy resulting from the provision of more complete information seemed to indicate that the judges responded in terms of the individual characteristics of the interviewees, as well as in terms of group norms.

A slightly different approach is that of Zajonc (1960) who investigated the process of "cognitive tuning" in communication. In two experiments he examined the cognitive effect of an individual's role in the communication process. He developed a systematic method for the description of cognitive structures, and in his first experiment, individuals who expected to transmit information and individuals who were expecting to receive information were compared with respect to the extent of differentiation, complexity, unity, and organisation. The results showed that, in the state of initial expectancy, potential transmitters activate cognitive structures which are more differentiated, complex, unified and organised than those activated by potential receivers.

Zajonc's second experiment involved the anticipation of dealing with incongruent information, and, in comparison with groups dealing with congruent information, those expecting to deal with incongruent information generally showed decreased differences between transmitters and receivers. He accounted for these results by an increase in the proportion of specific cognitive components and in the tendency to reject material inconsistent with the individual's own opinion.

Individual differences in tasks involving this principle of differentiation were investigated by Gardner & Schoen (1962), in their study of differentiation and abstraction in concept formation. They reported that early studies of individual differences in 'equivalence range' indicated that individuals are consistent over time in this aspect of concept formation, as measured in sorting tests and in a variety of other situations. Gardner & Schoen further explored these findings by re-conceptualising individual consistencies in terms of a dimensional principle of cognitive control called 'conceptual differentiation'.

Their main findings from three studies indicated that individual consistencies in conceptual differentiation are demonstrable in a wide variety of test situations in addition to sorting tests. They also found that preferred level of abstraction is apparent in a variety of situations over a brief period of time, but fluctuates considerably over longer periods. Further findings show that conceptual differential and preferred level of abstraction are independent of Verbal, Performance and Total I.Q. scores of the Wechsler- Bellevue Tests, and of capacity to abstract as measured by the Wechsler- Bellevue Similarities subtest. In addition, there was evidence that powerful response sets, independent of conceptual differentiation and category width, determine individual consistencies in the number of adjectives checked in a variety of check-lists. These results have significant implications for the complexity of concept formation and the cognitive structures relevant to individual differences.

Scott (1962) approached the subject somewhat differently. He was not so much concerned with concept formation, per se, as with the number of concepts an individual employs in various tasks. One of his experiments was concerned with cognitive complexity and cognitive flexibility. In it he defined cognitive complexity as "the number of independent dimension-worth of concepts the individual brings to bear in describing a particular domain of phenomena". He further claimed that this could be

assessed "with a measure of information-yield based on an object-scoring task". Cognitive flexibility was defined as "in response to appropriate environmental stimuli". This latter could be assessed "by inviting the subject to expand the groups he had created on the original sorting task". In general, the greater a subject's cognitive complexity, the greater is the likelihood that he will expand the groups, and the greater is his tendency to gain information (i.e. dimensional complexity) by the expansion. Scott found that his measure of dimensional complexity was fairly stable over two different lists of objects, and also it correlated with independent measures of knowledge about the object-domain.

Further work done by Scott (1963) was in the area of cognitive complexity and cognitive balance. In it he used the idea of 'structural balance' proposed by Heider (1946) and others, as a normal or preferred state of cognitive functioning. Scott's research was designed to qualify Heider's ideas by investigating some conditions under which balance structures are more or less likely to prevail. He discovered, both in a sample of college students and in a more heterogeneous group of non-college adults, that the degree of balance in subjects' free grouping of nations was negatively correlated with the dimensional complexity of the cognitive space used in forming the groups. The cognitively complex individuals tended towards unbalanced grouping. In the college student sample the groupings of the nations based on perceived friendship patterns tended to yield balanced groups to a greater extent than did grouping based on unspecified criteria.

Yet another method of investigating cognitive complexity was proposed by Mayo & Crockett (1964). They investigated cognitive complexity and primacy-recency effects in impression formation. In their research the term 'cognitive complexity' was used in a sense similar to that of Bieri (1955). Mayo & Crockett found that the complexity of a subject's cognitions about other people affected the manner in which he utilised information about others in forming impressions of them. Further experiments sought to elucidate various relationships between cognitive differentiation and complex

relationships among the individual's interpersonal concepts.

The above approach to cognitive complexity adopted by Mayo & Crockett, along with that of previously mentioned researchers, was carefully surveyed by Vannoy (1965) in his work on the generality of cognitive complexity- simplicity as a personality construct. His research suggested that cognitive complexity is not as general a trait as has sometimes been implied in the literature.

Vannoy selected no less than 20 different tests, each of which either (a) sought to measure cognitive complexity directly, or (b) sought to measure some closely-related factor. After applying all 20 tests to the same sample of (113) male subjects, he cross-correlated and factor analysed the 20 sets of results. However, his factor analysis did not yield a large first factor on which all of the tests, or even a large proportion of them, were substantially loaded. Vannoy agrees with Gardner & Schoen (1962) and Scott (1963) that no single principle can account for complexity-simplicity, as against those who postulate a unitary trait. However, these results pertain to only one area of research on cognitive complexity - the way in which the individual construes person-objects in his environment. Vannoy added the caveat that it is entirely possible that a quite different factor structure would have emerged had the sample been heterogenous with respect to sex, or made up of females alone.

Vannoy's research suggested three broad classes of behavioural tendencies in which only a part of the total realm of behaviour was included. The first tendency was to emphasise one or a very few judgemental variables (e.g. competence, 'goodness', congeniality) to the exclusion of others. Opposed to this was a tendency to be sensitive to many variables. As different individuals emphasised different variables, no single factor was sufficient to represent a distinction. Another important tendency highlighted by Vannoy's research, concerned the manner in which individuals used judgemental variables. For example, some individuals assigned people to only two or three positions on such variables, whereas others make much finer distinctions. It also seemed likely

that there was a tendency for certain persons to maintain a narrow perspective which permitted a highly ordered view of the world.

Although these behavioural tendencies may be viewed as an aspect of cognitive complexity-simplicity, Vannoy drew attention to the fact that they are manifested by different factors. An individual who is cognitively simple according to one of these three criteria might be cognitively complex on one or both of the other two. Thus Vannoy's research yielded little support for the view that there exists a unitary cluster of traits which would have fitted the current conceptualisation of cognitive complexity.

Further work by Vannoy supported his conclusion that what had been termed cognitive complexity may consist of several relatively independent conceptual dispositions. Vannoy also maintained that as different tendencies ought to have different behavioural consequences, the observation of differences between the behaviours of individuals who differ in their responses to test instruments, would increase an understanding of this aspect of cognitive processes. Measures which assess differentiation of the cognitive domain consisting of individuals in the environment might be related to measures of conceptual differentiation in general. Vannoy concluded that the type of behaviour exhibited in tests of cognitive complexity (reference to Gardner & Schoen), may be simply one aspect of a more general characteristic of human thought usually referred to as concept formation.

Thus these early research workers were in general agreement that cognitive complexity refers to the number of dimensions that are perceived and evaluated by a particular person, and the extent to which that person is able to manipulate such dimensions in his thinking. More recent researchers have sought to investigate the phenomenon of cognitive complexity in connection with delayed auditory feedback and complexity of tasks. (Collins & Worthington, 1978). They investigated the differential effects of delayed auditory feedback upon four tasks varying in cognitive complexity.

The tasks involved the manipulation of two primary variables - that of mode of presentation (symbolic or pictorial), and that of response mode (reading or spontaneous speech production). All the subjects completed a delayed auditory feedback task and also performed the same task under a synchronous auditory feedback condition. Collins & Worthington found the main effects and the interaction effects to be significant. The delayed auditory feedback data and error data suggested that the cognitive complexity of the task was the primary determinant of the magnitude of the differential effect obtained under the delayed auditory feedback condition.

Yet another slant to considering cognitive complexity was introduced by Blaas & Heck (1978). They investigated selected process variables as a function of client type and cognitive complexity in novice counsellors. Blaas & Heck based their research on Vannoy (1965), in that they took cognitive complexity to refer to the number of dimensions or the degree of structural differentiations in some content domain. They also concurred with Bieri (1961), in that they viewed social behaviour as a tendency to interpret events and the behaviour of others in multiple ways, such that a more cognitively complex person has available a more versatile system for processing information about the behaviour of others than does a less cognitively complex person.

Blaas & Heck viewed the counselling process as the mutual exchange and processing of complex verbal and non-verbal information. Because counsellors differed in their cognitive structure, they felt it reasonable to assume that such a difference might be related to subsequent variation in their ability to process relevant information about the behaviour of another, thereby having a differential impact upon the process and outcome of counselling. The researchers looked at the effect on four selected counselling process variables by employing multiple measures of cognitive complexity and varied counselling tasks. Cognitive complexity was assessed with five separate measures, and the counselling tasks consisted of two counselling sessions with simulated (and hence standardised) clients. The process variables were counsellor-client congruency,

counsellor empathy, counsellor verbal mode, and subrole. Blaas & Heck found that counsellor cognitive complexity did not significantly discriminate between measures on the four process variables. However, there was a significant difference in performance on three process variables (counsellor subrole, verbal mode and accurate empathy) between the two counselling tasks. There was also a significant interaction between counselling tasks and the low-complexity group on the variable of accurate empathy. In addition, the differences in the simulated clients appeared to be more influential on certain process variables, than the information processing style of the student counsellor. For a closely-related study of cognitive complexity in counsellors, see also Lichtenberg & Heck (1978).

An elegant piece of research done by Harren, Kass, Tinsley & Moreland (1979) looked at the influence of gender, sex-role attitudes, and cognitive complexity on gender-dominant career choices. The subjects of the investigation were U.S. college students who had made a choice of major and occupation, and who had indicated that they were highly satisfied with their choice. The majors and occupations chosen were assigned a male-dominance index representing the proportion of men to women in the field. This index for major and for occupation served as the criterion variable. The predictive variables were gender, sex-role attitudes and cognitive complexity. The results showed that gender significantly predicted choice of gender-dominated majors and occupations. With respect to cognitive complexity, it was found that students who used more constructs in judging female-dominated occupations tended to choose male-dominated majors. It was also found that women are less cognitively complex than men in judging female-dominated occupations.

It should be noted that these findings are consistent with Bodden & Klein's (1973) findings that more constructs are used in judging disliked occupations than liked occupations. They concluded that people have more reasons (use more constructs) for rejecting alternatives than they have for accepting alternatives. The authors remark that

their findings have implications for expanding career options for women. Women might be trained, for example, to use a wider range of relevant constructs to evaluate female-dominant occupations, thus providing them with a better basis for assessing these occupations.

It is also interesting that the masculine-related sex-role and cognitive complexity measures were not predictive of gender dominance. More work needs to be done studying the sex-role appropriate behaviour of men, especially in light of the assertions of Pleck & Sawyer (1974) and David & Brannon (1978), that men's roles are constricted, just as women's roles are, as a result of differential socialisation.

Schneier (1979) attempted to investigate the psychometric properties of a personality instrument used to measure cognitive complexity. He used Bieri's (Bieri, Atkins, Briar, Leaman, Miller & Tripodi 1966) grid form of Kelly's (1955) Role Construct Repertory Test as an instrument to measure complexity. Schneier found statistically significant evidence for test-retest reliability, and for convergent and discriminate validities of Bieri's (Bieri et al., 1966) grid form of the Cognitive Complexity test to measure cognitive complexity. The scores on the instrument were found to be stable across administrations for the same sample, and to correlate significantly with scores obtained from Scott's instruments designed to measure conceptually similar constructs. The psychometric properties of the grid form of the Cognitive Complexity test were found to be enhanced by the modifications that Vannoy (1965) made to reduce "social desirability" bias in his subjects' responses.

Other variables of interest in the research such as sex, occupation, college major and level in the organisational hierarchy did not influence complexity scores markedly. This suggests that the instrument was able to generate stable scores across diverse samples. Some additional merits of using the grid form in research investigating cognitive complexity, were its ease and speed of administration and its objective scoring

procedures. Thus Schneier's research goes some way to substantiate the argument for the generality of cognitive complexity, notwithstanding Vannoy's (1965)) misgivings to the contrary.

Finally, it is worth noting that the assessment of the learning-disabled, with regard to cognitive functioning and cognitive complexity, has been investigated by Castiglione (1981). He maintained that, in the past, assumptions about the nature of the learning-disabled population, about the adequacy of ordinary assessment processes; and about the nature of assessment itself tended to lead professionals to unwarranted conclusions. The various purposes of assessment have affected the types of assessment used, and the interpretation of the results - which have been inconclusive. Suffice it to say, that as information on the cognitive functioning of learning-disabled children emerges, a parallel, independent body of knowledge suggests investigating the cognitive complexity of learning-disabled children, both to improve the conceptual understanding of learning disability; and to support directions for educational recommendations.

CHAPTER 3

A REVIEW OF THE REVIEW

Introductory Remarks

Thematic literature reviews all tend to get compiled in much the same way. This is almost inevitable. If a researcher gets seriously interested in a particular topic, it follows that he will already have done some reading of the source literature. Typically, he will return to the literature with a view to listing and obtaining any further references that seem to be worth pursuing. He will also consult relevant abstracting and document retrieval services, using appropriate "key word" descriptors. If time and resources permit, he may additionally try to meet, or at least correspond with, already-established authorities in the field.

These procedures cannot be guaranteed to identify every relevant book or paper. Certain publications will invariably escape general notice - e.g. because they have appeared in little-known journals, or because they have been abstracted under seemingly irrelevant topic headings. In addition, of course, standard retrieval procedures will not identify very recent papers, or publications issued in foreign languages. On the other hand, experienced researchers do seem to have considerable skill in "sniffing out" references that matter. So a review conducted along the lines indicated will generally provide a fairly accurate overview of a given body of knowledge, at least from the standpoint of workers who have already established their credentials in the area. For the purposes of this particular thesis, this is as much as is needed.

The Review in Summary Form

On the assumption that chapter 2 does provide a reasonably accurate account of

the way in which cognitive complexity research has developed over the past 33 years, it is now appropriate to offer a brief preliminary critique. Specifically, there is a need to provide helpful orientating summaries of the literature - e.g. by calling attention to general trends, pervasive assumptions, and (where necessary) significant omissions.

With regard to the identification of general trends, it is worth saying at once that work on cognitive complexity has developed in a largely-to-be-expected manner. As indicated in chapter 1, scientists do not usually take very kindly to proposals that some entirely new concept/topic/issue should be injected into their theorizings. Unless the new concept is introduced for the explicit purpose of overcoming some known and troublesome difficulty (as sometimes happens, for example, in fundamental particle research in physics), there will be a tendency for scientists to assume that there is no pressing need to take cognisance of it. The assumption will be that the proposed new concept etc. must be either misconceived or redundant or unimportant. Otherwise questions will arise as to how researchers have managed to do without it so far.

It follows that the attempt to introduce some new concept into an already-existing body of research is unlikely to succeed unless a strong prima facie case can be made out. Typically, the concept (and, by implication, the class of phenomena to which the concept refers) will have to be dignified with a new name, to reinforce the idea that there is something new and isolable that is capable of being studied in its own right. An account must then be given, at least in general terms, of what the new concept is all about, and why it deserves to be taken seriously. This in turn involves the further task of locating the new concept or phenomenon in the already-existing scheme of things - e.g. by showing how it might relate to other relevant concepts and phenomena. Finally, a provisional attempt must be made to show how the proposed new phenomenon might be scientifically investigated - either by observing it directly under suitably controlled conditions, or by observing its supposed effects. At the very least, some procedure must be suggested for identifying and/or measuring the phenomenon in question, so that

its "deeper nature" may be more thoroughly explored.

If a theoretician/researcher wishes to introduce, into the main body of psychological science, the idea that there is some hitherto-neglected phenomenon that deserves to be looked at, he is virtually compelled to take the kinds of steps indicated in the previous paragraph. Having regard to the way in which scientists think and work, the steps have a feel of logical necessity about them. They could hardly be otherwise. This being so, it is not surprising that Barron's (1953) paper followed the general pattern described. His achievement was the creative one of conjecturing the presence of some possibly important "factor" or "consideration" which had previously gone undetected and (hence) unnamed. He tentatively characterised it as being a complexity-simplicity dimension of personality. He indicated in general terms what he thought it was, and why he considered it to be worthy of further investigation. He developed a way of measuring it (or, more precisely, a way of measuring the magnitude of its possible influence in certain situations). And, in doing all of these things, he tentatively located it in the wider corpus of psychological research.

Since psychologists (like most other scientists) tend to build on the work of predecessors, the subsequent developments were no less predictable. For example, later workers almost immediately started to wonder about the generality and importance of the complexity-simplicity dimension that Barron had posited. In other words, they asked whether it was really an all-pervasive judgemental trait, as opposed to being a largely "situation-specific" trait. And they also asked, but to a lesser extent, about the magnitude of its casual influence in those situations where it did appear to be operative. Naturally, there were also misgivings about the way in which Barron had characterised (i.e. tentatively defined) his complexity-simplicity dimension. Somewhat different conceptualisations were proposed (e.g. by Scott, 1962), and these were associated with somewhat different methodologies and modes of measurement. At the same time, a few skeptics (such as Vannoy, 1965) tackled the question of whether Barron's innovation

was needed at all. By relating Barron's measure to other already-existing measures, Vannoy came close to concluding that different aspects of cognitive complexity could be fairly adequately measured or "tapped" by such tests and Kelly's (1955) Construct Repertory Test, and Pettigrew's (1958) Category Width Scale, and so on.

In all these respects, the development of research on cognitive complexity has, in its general form, largely followed the conventional "normal science" pattern. By the time of Vannoy's (1965) paper, it is probably true to say that there was something of a surfeit of tests/measures that could claim to "have something to do with" the assessment of cognitive complexity. So it then became possible for subsequent researchers to take their pick from the set of extant tests, rather than worry about having to construct yet further tests of their own.

At this stage (i.e. around 1965), a whole range of correlational opportunities were opened up, in the sense that a whole variety of different populations (teachers, disabled persons, males v. females, business executives, and so on) could be checked out (a) to see how they differed from other populations, and (b) to see how different personality characteristics tended to be related within the same population. For example, males could be compared with females to see which of these two populations tended to be more cognitively complex. And, within a given population (e.g. the population of business executives in industry and commerce), it was possible to enquire whether effective leaders tended to be more cognitively complex than ineffective leaders. There is very little point in pursuing all these possibilities here. There is clearly no limit to the number of correlational studies that might be attempted. If some researcher has reason to believe (for example) that divergent thinkers are likely to be more cognitively complex than convergent thinkers, it is a straightforward matter to apply the relevant tests and cross-correlate the results. This is an easy game to play, and one that could go on filling empirically-orientated journals of psychology for all eternity.

If we now ask where 30 years of research into cognitive complexity has all led to, we find that the overall state of the science is well summed up in the article by Lichtenberg & Heck (1978). In slightly modified form, this reads as follows:

"... Of particular relevance to the concept of individual information processing differences is the construct of cognitive complexity - specifically as it relates to the cognitive processing of interpersonal stimuli... Although various authors differ somewhat in their respective meanings of the construct, cognitive complexity is generally understood to refer to the number and organization of dimensions (i.e. possible meanings) employed by a person in the discrimination and evaluation of interpersonal stimuli...

Research suggests that, at least with regard to the cognitive structuring of interpersonal stimuli, the construct of cognitive complexity is not a unitary trait, but rather a multifaceted construct reflecting several different types of cognitive processing... Assuming cognitive complexity to be a heterogeneous construct, it is possible to cluster individuals with respect to their respective similarities across types of cognitive complexity, thus forming relatively homogeneous groups of individuals with respect to their particular style of cognitive processing. To the extent that these homogeneous groups differ among themselves with respect to their style of processing interpersonal information, it is hypothesized that different interaction response patterns and processes would be generated..."

This quotation undoubtedly conveys, in an accurate manner, the overall gist and thrust of most of the more recent work on cognitive complexity. There have of course been changes of emphasis over the years. It is fairly clear that, for Barron (1953), cognitive complexity referred at least in part to what would commonly be described as "subtlety of mind". Barron (1953) also saw his complexity-simplicity dimension as being operative over the whole range of both cognition and perception. Vannoy (1965) shrewdly noted this last point in the quotation cited in chapter 2. His succinct way of expressing it was to say that cognitive complexity tended to be seen (by previous researchers) as "a variable which influences people's perceptions and evaluations of events". The reference, here, to both perceptions and evaluations preserves Barron's original conceptualisation. And the reference to events suggests (also in accordance with

Barron, 1953) events of any kind.

With the appearance of Bieri's work (around 1955), both of these connotations began to fade. First of all, emphasis shifted away from perception, and towards "cognitive judgement". Secondly, emphasis also shifted away from "events-in-general", and towards the much narrower class of interpersonal events. Since Bieri, along with most later workers, gave a multivariate information-processing gloss to their work, notions such as "subtlety of mind" also faded from view. So far as Bieri and others were concerned, a person who makes subtle judgements about other people is "simply" a person who has more categories or dimensions of discrimination at his disposal.

In summary, then, it is possible to identify two general trends in the way in which cognitive complexity research has developed since 1953. First of all, researchers have tended to relinquish the perceptual choice approach of Barron, in favour of more direct methods of studying cognitive complexity. Given a choice between (a) making inferences about cognitive complexity on the basis of subjects' open-ended comments and preferences for paintings, odours, and other sensory stimuli, or (b) studying cognitive complexity more directly, increasing numbers of researchers have opted for the (b) course. Secondly, there has been a definite tendency, in recent years, to focus on the way in which cognitive complexity operates in the interpersonal domain. Whereas Barron was interested in the cognitive complexity that people display in any situation whatever (e.g. in situations where they are called upon to handle scientific and technological problems), Bieri and others have been predominantly interested only in the cognitive complexity that people display in their dealings with one another.

Both of the trends mentioned in the last paragraph constitute a significant narrowing down of Barron's original conceptualisation. One reason for this is that Barron originally hypothesised the existence of a very general complexity- simplicity dimension - one that might underly processes of perception, cognition, and even affect

as well. By concentrating solely on cognitive complexity, subsequent researchers have obviously lost something of the generality of Barron's original vision. To make matters worse, recent researchers have focussed down still further to the matter of cognitive complexity in the interpersonal domain. And this is much more difficult to justify. It will be recalled that Barron himself studied the cognitive complexity that subjects (artists, etc.) displayed when confronted with works of art etc. But most recent workers seem to be exclusively interested in the cognitive complexity that people display in their dealings with, and judgements about, one another. This is obviously an important area to research. But there is surely much to be gained, also, from an enquiry into (say) the cognitive complexity that professional people display in their attempts to develop science and technology. We shall return to this point in the next chapter.

Assumptions and Omissions

If we look at the research literature (on cognitive complexity) as a whole, several all-pervasive and never-questioned assumptions can be discerned. Most important of these is the ubiquitous assumption that cognitive complexity is generally superior to cognitive simplicity. There is very little doubt about the prevalence of this assumption. For example, it was Barron's artists who made the "most subtle" and "most interesting" comments on the paintings that he showed to them. By comparison, non-artists made what Barron obviously regarded as rather "crude" and "simple-minded" judgements. For Bieri as well, and for most researchers that followed him in this field, cognitive simplicity seems to be roughly synonymous with cognitive crudity. For Bieri, the cognitively simple person is the person who makes crass and over-simple judgements about his fellows. The overall implication seems to be that the cognitively simple person is, in general, likely to be more socially inept, and less perceptive, than his cognitively complex counterpart. What is never countenanced, in discussions of this kind, is the possibility of there being a superior kind of simplicity - the kind of simplicity which enables people to cut through obfuscation, to "see the wood for the trees", and to be

utterly simple in their dealings with others ('simple' in the sense of being honest and straightforward and uncomplicated and non-devious).

Several other all-pervasive assumptions deserve comment. For example, there is the assumption that the study of cognitive complexity requires only a minimal ability to conceptualise new ideas and theories. Too many researchers give the impression that they need formulate only the barest account/definition of what cognitive complexity is. But this does not inhibit them from devising measures of "it". A related assumption is that the study of cognitive complexity can best be advanced by the stockpiling of more and more correlational findings. The idea seems to be that, if enough test scores are correlated with enough other test scores, and if the whole data set is subjected to various factor-analytic and related techniques, then, somehow or other, the results of such analyses will "speak for themselves". Vannoy's (1965) paper is of this latter kind.

From the general tenor of the last two paragraphs, it will be obvious that I do not agree with these (and other related) taken-for-granted assumptions. What is omitted from consideration is a much more detailed and sensitive enquiry into how this "thing" called cognitive complexity might best be construed. Unless we can arrive at a clear idea of what we are taking cognitive complexity to be, it is altogether premature to embark on experiments that seek to measure it. In the absence of clear-cut definitions, there is no well-defined "it" to measure. In the chapter that follows, an attempt will therefore be made to come to grips with, and largely resolve, the key conceptual problems.

CHAPTER 4

COGNITIVE COMPLEXITY RE-CONCEPTUALISED

On Making a Fresh Start.

Throughout the whole of science, there is an almost universal assumption that researchers should, wherever possible, build on the work of their predecessors. Anyone who tries to make a fresh start is likely to be suspected of arrogance - of trying to prove that he (or she) is more insightful etc. than all the well-regarded researchers who have gone before. Even when a particular body of science is in a state of manifest disorder (e.g. a state of impasse or "no progress"), there is still an assumption that current researchers should stay within, and try to improve upon, whatever already exists. People say things like, "We cannot just turn our backs on all the work that has been done so far... We have to start from where the research is at... We must build on what is already there...."

Now it may well be good advice to tell researchers ~~never to reject previous~~ research too lightly. But it does not follow that researchers are obliged to take, as their own point of departure, whatever corpus of work already exists. Sometimes it is better to attempt a new start. And, if researchers are unable to see this, their inability might be due to their having become too deferential towards their peers and predecessors. They may even be lacking in creative imagination. Perhaps they are simply unable to imagine what a new start might look like.

As a practical stratagem for the potentiation of new ideas, there is much to be said for adopting a skeptical and even cynical attitude towards other people's work. It is widely agreed, for example, that Frank Barron's research is generally of very high

quality. Even so, it is never in the best interests of science to read the work of such people in an excessively deferential and uncritical way. It is often very much better to pretend that, in spite of their high reputations, and in spite of their authoritative way of writing, they might nevertheless have got certain things seriously wrong. To approach their work in this kind of questioning spirit is to put oneself permanently on the alert for unwarranted assumptions, misdirected conjectures, and even (in some cases) crass oversights.

The Case of Lichtenberg & Heck

As an example of possible "crassness" in the domain of cognitive complexity research, it is instructive to return to one of the papers discussed in chapter 3 of this thesis - namely, the paper by Lichtenberg & Heck (1978). Two passages were quoted from this paper, and one of them contained a brief summarising "definition" of what cognitive complexity is usually taken to be. The relevant sentence runs as follows:

"Although various authors differ somewhat in their respective meanings of the construct, cognitive complexity is generally understood to refer to the number and organization of dimensions (i.e. possible meanings) employed by a person in the discrimination and evaluation of interpersonal stimuli."

As indicated in chapter 3, the Lichtenberg & Heck paper gives a fairly accurate portrayal, overall, of the way in which researchers have tended to construe cognitive complexity in recent years. The definition just quoted is also quite typical and, if we read it in a deferential manner, it may well strike us as being wholly unexceptionable. But if we approach it in a skeptical/cynical manner - e.g. from the standpoint of someone who is ready to suspect that the authors do not always know what they are talking about - the thought might occur to us that the Lichtenberg & Heck definition is deeply confused and unsatisfactory.

First of all, we see that Lichtenberg & Heck have characterised cognitive complexity as referring to "the number and organization of dimensions (i.e. possible meanings) employed by a person in the discrimination and evaluation of interpersonal stimuli". By defining cognitive complexity in this way, they dogmatically rule out the possibility of there being any such thing as cognitive complexity outside of the interpersonal domain. However, it is totally lacking in credibility to suggest that cognitive complexity cannot be manifested in other domains. Surely, people can be cognitively complex with respect to (say) their hobbies, or their profession, or their pets? Do we really want to say that chess players cannot be cognitively complex with respect to chess, or that Lawyers cannot be cognitively complex with respect to International Law? If our answer to such question is "No", then the Lichtenberg & Heck definition (along with several others like it) would appear to be careless. At best, it would be acceptable only as a definition of "Interpersonal Cognitive Complexity". It could never be acceptable as a definition of cognitive complexity in general.

Let us next look at the somewhat jargonistic language in which the Lichtenberg & Heck definition is couched.

The definition begins by characterising cognitive complexity as "a construct". Again, this is typical of what many other researchers (e.g. Castiglione, 1981) say. But what does it mean? The fact is that 'construct' has for many years been something of a weasel word in theoretical psychology. Endless arguments have raged about the alleged differences between hypothetical constructs and empirical constructs, etc. Numerous arguments have also been mounted about possible differences between hypothetical constructs and intervening variables. As a result of all this controversy, 'construct' is nowadays the sort of word that can look very rigorous, but mean very little.

In the present context, it is difficult to see what is gained by characterising

cognitive complexity as a construct. In attempting to theorise about cognitive complexity, it is minimally necessary to bear in mind the experiential aspects of the phenomenon, as well as the behavioural and information-processing aspects. To say that cognitive complexity is a construct is to give the impression of lumping all these aspects together under a single blanket term or expression. The result is bound to be an expression whose ontological and epistemological status is unclear. Among other things, the reader who encounters the expression "cognitive complexity" may never be entirely sure whether it is intended to refer (a) to the experience of cognitive complexity, or (b) to the way in which such experiences are being described, or (c) to the information-processing "mechanisms" (mental and/or physical and/or linguistic) that are hypothesised as lying behind and/or giving rise to cognitive complexity. None of this may matter to the uncritical reader. But, to the reader who likes to be clear about what is being said, and to the reader who has followed some of the many scientific debates on the nature of theoretical entities, it is quite mystifying to find cognitive complexity described as if it were, always and everywhere, "a construct". Such an assertion is at odds with the philosophy of science literature. At best, it is confusing. At worst, it is wrong.

The fact is that the expression "cognitive complexity" necessarily has different meanings (and different nuances of meaning) in different contexts. At times, Lichtenberg & Heck are obviously wanting to talk about the overall phenomenon of cognitive complexity - i.e. they are wanting to talk about what is going on, overall (in the brain, and linguistically, and information- processing-wise), when a person is said to be thinking in a cognitively complex way. At other times Lichtenberg & Heck are wanting to talk about the theoretical language that is needed to "do justice" to this overall phenomenon. On these latter occasions, they would generally be better advised to talk about the concept, rather than the phenomenon, of cognitive complexity. At yet other times, Lichtenberg & Heck are apparently wanting to talk about cognitive complexity as a sort of information-processing mechanism or "structure". And there are even times

when Lichtenberg & Heck are wanting to talk about cognitive complexity as a research topic, within the wider discipline of cognitive psychology or personality theory. There is no way in which these (and other) different meanings can all be accommodated by the use of the single word 'construct'. To insist, in every context of discussion, that cognitive complexity is a construct is to be cognitively simplistic about cognitive complexity. In passing, let us note that it is also somewhat slipshod of Lichtenberg & Heck to say that various authors "differ somewhat in their respective meanings of the construct". It would obviously be better English to say that various authors "differ somewhat in the meanings that they give to the construct". This might seem to be a very small quibble. But lack of attention to language, in a matter as important as the giving of a key definition, can be very revealing. In general, it can occur only in researchers who are largely unconcerned about (or insensitive to) the deeper implications of what they are doing.

If we proceed further into the Lichtenberg & Heck definition, we find things get steadily worse. Notice, for example, the curious phrase "dimensions (i.e. possible meanings)". Are Lichtenberg & Heck wanting to suggest, here, that 'possible meanings' should be regarded as a synonym for 'dimensions'? Such a suggestion could not possibly be right. There is no way in which a dimension could be a possible meaning.

And how, in the Lichtenberg & Heck definition, are we supposed to construe the relationship between "meanings" and "stimuli"? The former word ('meanings') conventionally belongs to discourse about mental events, whereas the latter word ('stimuli') traditionally belongs to discourse about physical events. Are we therefore supposed to construe cognitive complexity as being some kind of (hypothetical?) construct that mediates between the mental and the physical? The more closely one looks at the Lichtenberg & Heck definition, the more opaque it seems to become.

Defenders of the Lichtenberg & Heck definition might wish to argue that no single-sentence definition is ever going to be capable of answering the kinds of questions posed in the previous paragraph. However, this sort of defence would miss the point. The point being made is the harsh one that the Lichtenberg & Heck definition, as it stands, could not possibly be correct. It simply does not stand up to tough-minded scrutiny. Any serious attempt to answer the kinds of questions raised in the last paragraph would inevitably suggest ways of improving on the definition (and, in the process, improving on the standard of English as well).

In case these last comments seem to be unduly harsh, interested readers might like to refer back to the remainder of the quotation that was given in chapter 3. They will then see for themselves that the English, along with the level of exposition, leaves much to be desired. For example, the second paragraph of the quotation from Lichtenberg & Heck suggests that cognitive complexity might be "a multifaceted construct reflecting several different types of cognitive processing..." The most charitable thing that can be said of this suggestion is that it is metaphorical, rather than scientific. Again, the point is not a trivial one. If a researcher elects to use technical terminology (in preference to plain English), he is presumably striving to be rigorous. But if he is trying to be rigorous, he should avoid suggesting that constructs are the sort of entities that can (a) reflect, and (b) be "multifaceted". As already indicated, there is quite a lot of disagreement as to what constructs are. But, insofar as there is any consensus at all, there is some agreement that the main function of a construct, in standard theoretical discourse, is to refer to some comparatively isolable phenomenon or entity and, in so doing, to help relate other named entities (hypothetical or otherwise) to one another. It has never been the function of constructs to "reflect". If rigour is the goal, 'reflect' is simply an inept choice of word. It also needs to be said that although a single construct might (albeit with difficulty, and only in a gross sort of way) be construed as referring to several different things - e.g. to "several different types of

cognitive processing" - this does not mean that the construct is itself multifaceted in anything other than a loose metaphorical sense. However, Lichtenberg & Heck seem to be seriously raising the possibility of inventing a single construct that could somehow reflect or capture a variety of different real-world phenomena - e.g. in the way that a diamond can reflect or capture light emanating from a variety of different light sources. This is not tenable science. Rather, it is a mix of pretentious-sounding jargon, visual metaphor, and poor English.

Before completing our dissection of the Lichtenberg & Heck definition, there is one further test that needs to be made. In some respects, it is the most important test of all because it directs attention away from the detail of their definition and towards what might be called its overall gist or drift. In effect, the idea is simply to look at the definition as a whole and, without worrying too much about specific infelicities of style and language etc., to ask whether it generally seems to be "along the right lines". As Aristotle somewhere remarks, the most that a brief definition can do is to capture the essence of things. To achieve this, a definition must highlight the essential characteristics of that-which-is-being-defined. And it must, moreover, do this in a credible way. In other words, the reader must be left with the feeling that the definition has captured what really matters, rather than only a small part (and possibly not the most important part) of what really matters.

Unfortunately, we already know that the Lichtenberg & Heck definition is unable to pass this test. The reason for this is that, in the eyes of these two authors, cognitive complexity is centrally and exclusively concerned with the way in which people perceive and judge one another. Since their definition does not allow for the possibility of their being such a thing as cognitive complexity outside of the interpersonal domain, their definition is unacceptably restrictive. It captures only a part of what really matters.

However, if we politely overlook this defect, we can still ask what else the

Lichtenberg & Heck definition has to say, in general terms, about the nature of cognitive complexity. The answer to this question then depends on what we choose to make, overall, of their assertion that cognitive complexity has something to do with "the number and organization of dimensions (i.e. possible meanings) employed by a person in the discrimination and evaluation of (interpersonal) stimuli".

Obviously, there are difficulties about interpreting a sentence of the kind just quoted. For example, the word 'employed' seems to be figurative ('used' or 'activated' might have been better words). And, as already indicated, the word 'dimensions' is not at all clear. If the bracketted expression "(i.e. possible meanings)" had not been inserted, the word 'dimensions' would normally have been read (by most experimental psychologists) as "dimensions of discrimination and/or evaluation". But even this would seem odd in the present context, because the definition would then be construing cognitive complexity in terms of "the number and organization of dimensions of discrimination and/or evaluation employed/used in the discrimination and/or evaluation of stimulus configurations..."

Because of these doubts and ambiguities, all we can do is to read the Lichtenberg & Heck paper in its entirety, and then try to come up with our very best guess as to what the authors are really attempting to say. If we do this, the overall essence of their definition seems to be adequately summed up as follows:

Some people notice more things than others. Moreover, the things that they do notice are sometimes "organized" in more intricate ways. People of whom this can be said may be described as cognitively complex.

Perhaps we could amplify the first sentence by saying that some people notice more things about particular kinds of situation than do other people. And we might also amplify the second sentence by saying that the things that people do notice are sometimes

"organized" in more intricate ways, in the sense that they are more richly inter-related with one another, and with other things as well. However, both of these amplifications would be going beyond what Lichtenberg & Heck actually say. As the reader can see, Lichtenberg & Heck make no attempt to elaborate on what they mean, in their own definition, by the word 'organization'. And there is no mention, anywhere in their paper, of the kinds of complex non-linear relationships that General Systems Theorists try to grapple with in their own work on complex systems.

For the moment, however, let us stick with the paraphrasing of Lichtenberg & Heck. Let us stay with the idea that the cognitively complex person is a person who (a) notices more things (about a given situation of interest to him), and (b) organizes the things that he does notice in more intricate ways. This is essentially (in essence) a "two-component" or "two-factor" characterisation of cognitive complexity. The clear implication is that people can be differentiated, with respect to cognitive complexity, on a two- dimensional graph of the following kind:

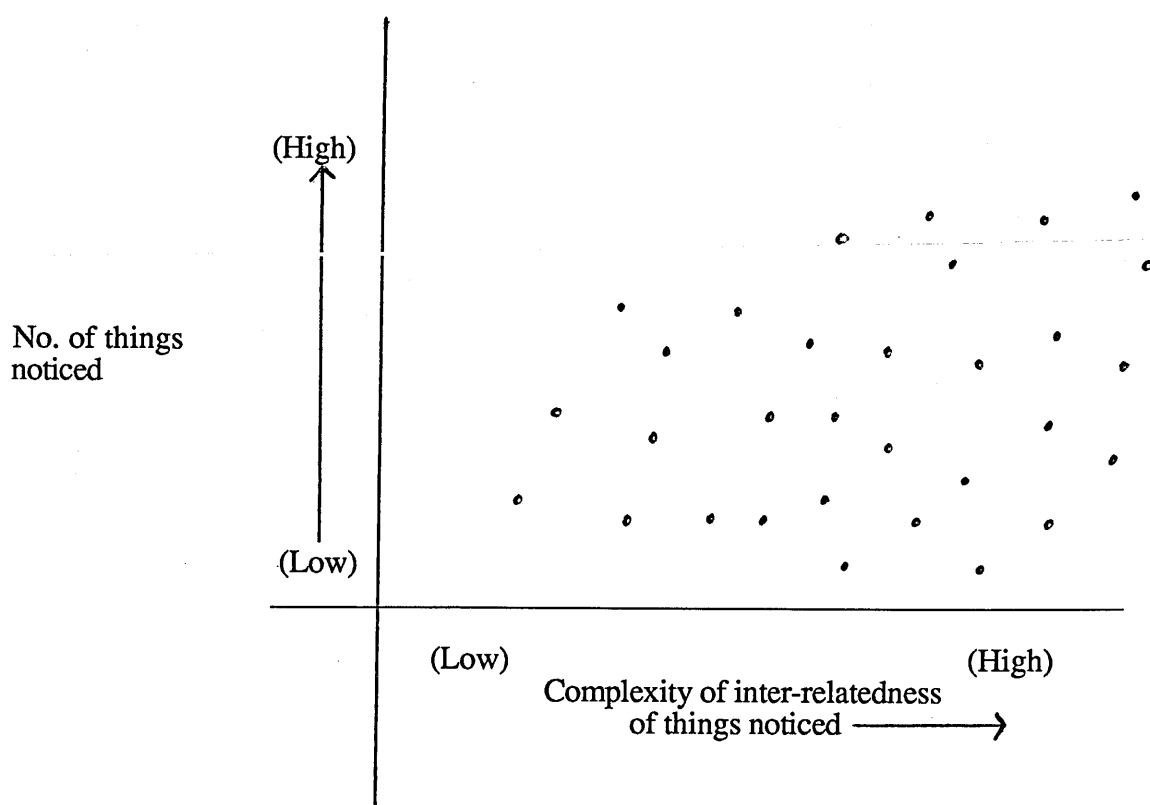


Figure 1. A Two-Dimensional Graph

Lichtenberg & Heck do not seem to recognise this implication. After defining cognitive complexity in their two-factor way, they go on to say:

"Research suggests that the construct of cognitive complexity ... is not a unitary trait, but rather a multifaceted construct ..."

(See chapter 3, for full quotation)

However, the above remark is doubly curious. If a construct is defined as involving, in some sense that needs to be elucidated, precisely two semi-independent factors (namely, number of dimensions and organization of dimensions), it must surely be a construct which, in their own metaphorical terminology, is precisely two-faceted. And there is no need for Lichtenberg & Heck to appeal to research (and to what research findings "suggest") to support the conclusion that the construct is "not a unitary trait". By their own definition, it cannot be unitary. There is no way, even in principle, in which a two-dimensional construct can be satisfactorily measured (i.e. measured without loss of information) on a uni-dimensional scale.

It would be something of an understatement to describe the Lichtenberg & Heck definition as unsatisfactory. The rigorous-looking talk about multifaceted constructs, unitary and non-unitary traits, dimensions, interpersonal stimuli, and the like, may well impress the uncritical reader. But closer inspection shows that their account is a mish-mash of pretentious-sounding jargon, and metaphorical/figurative terms - all woven together in substandard English. What is more, Lichtenberg & Heck do not seem to have even a minimal awareness of the more obvious implications of what they are saying. To assert that the notion of cognitive complexity is applicable only in the interpersonal domain is patently wrong and misdirective. And the metaphorical references to multifaceted and reflecting constructs are incompatible with their contention that cognitive complexity is basically to do with just two things - namely, the number and organization of "dimensions". There is no way in which a coherent body of psychological knowledge can be erected on theorising of this quality.

Unfortunately, it is very easy indeed - especially in the general field of personality research - for researchers to work and theorise with fuzzy, ill- defined, and unsatisfactory concepts. All that a researcher has to do is to open up a dictionary or Thesaurus, and select some human quality that does not appear to have been systematically studied before. He can then (1) devise some rough-and-ready definition of the quality that he has chosen, and (2) devise some test that looks as if it might be able to detect the presence (and the extent) of that quality in an appropriately-chosen sample of human subjects. At this point, the researcher is in the business of initiating a new bandwagon by showing how scores on his new test correlate with scores on everyone else's tests.

This is not intended to be a parody. It is an uncompromising but entirely serious statement of what actually happens. Suppose, for example, that a researcher notices the word 'vehemence' in his dictionary. It is a comparatively simple matter to dream up a provisional definition of what vehemence is, and to construct a test that looks as if it might measure the tendency etc. to be vehement. The next step is to show how scores on the vehemence test correlate with scores on tests of prejudice, authoritarianism, and so on. Vast opportunities are opened up. Vehemence in politicians, vehemence in salesmen, possible links between vehemence and petulance, the function of vehemence in committee meetings, and so on. By proceeding in this way, researchers can produce endless correlational statistics without ever being forced to go back and reconsider the validity of the provisional concepts and definitions that they started with. It is in the very nature of correlational data that they extend, rather than deepen, the network of associations. Having accumulated more and more data on what is correlated with what, we are not necessarily any nearer to understanding the deeper nature and genesis etc. of the phenomenon that we claim to be studying. And the correlational data do not in themselves compel us to reappraise our conceptual starting points. In particular, they never compel us to enquire whether our findings could be otherwise than what they are. The whole enterprise is one that can proceed at a

superficial level, and in polite disregard of countless other enterprises (or bandwagons) of a similar kind.

Other Definitions

There would be little point in tearing apart the Lichtenberg & Heck definition, if it were atypical of definitions in the cognitive complexity field. It is important to recognise, therefore, that the Lichtenberg & Heck definition is not atypical. If we turn to other writers, we do not find greater clarity. Rather, we find different kinds of confusion.

Consider, for example, the following statement by Castiglione (1981):

"At its simplest, cognitive complexity is a construct, an information processing variable, whereby the multiple dimensions of many bits of information are perceived and integrated into a cognitive organization, and where that organization can be expanded to include new information (Bieri 1966, Harvey 1966, Scott 1962).

Bieri's (1966) discussion defines and evaluates cognitive complexity as a tendency to construe social behaviour in a multidimensional way, such that a more cognitively complex person has available a more versatile system for perceiving the behaviour of others than does a less complex person. The basis for these differences is assumed to be represented by a cognitive structure that can be defined and measured by its dimensional characteristics.

Thus, first of all, what is being dealt with here is a dimensional basis of judgement. It includes differentiation, both between stimulus dimensions and within stimulus dimensions (articulation), and also integration of the differentiated dimensions in a way that produces minimal intrasystem conflict..."

These three passages are quoted verbatim and in sequence, without any editorial cuts or changes. They are obviously seeking to summarise, in as clear and succinct a manner as possible, the way in which the main researchers and theorists construe cognitive complexity, as of 1981. Castiglione begins his summary with the words, "At its simplest...". Perhaps this is a little joke, because there is nothing the least bit simple

or straightforward about the words that follow. If we allow the sentences to wash over us, in an uncritical way, we might be beguiled into thinking that the statement is both rigorous and satisfactory. But if we were to ask what Castiglione's words really mean, and if we were to press this question seriously, we would soon be bogged down in a morass of speculation and confusion. The language that Castiglione uses has all the superficial trappings of rigour. There is heavy talk about organizations and structures and stimulus dimensions, and about their differentiation and integration etc. There are allusions to multidimensional judgements. There are enigmatic references to versatility and articulation. And so on. But what does it all mean? If we attempted to take the statement apart, piece by piece, we would find ourselves embarking on an even longer critique. And the conclusion would surely be the same as the one that we arrived at in the case of Lichtenberg & Heck. There is no way in which a statement of this kind could withstand close scrutiny.

If we now ask how it is possible for researchers like Castiglione (and Lichtenberg & Heck) to make such incoherent statements and "get away with it", the answer is the X one already given - namely, that the gathering of correlational data does not require a coherent conceptual basis. In order to explore correlations between X and Y, all that a researcher needs is a procedure that purports to detect/measure X, and a procedure that purports to detect/measure Y. At the crudest level, it is enough to have a single test that "has something to do with X", and another test that "has something to do with Y". There is no necessity for the researcher to look any deeper into his conceptual foundations. All that he has to do is to apply the two tests to the same sample of subjects, and report quantified findings on the ways in which the test scores correlate. No conceptual precision, no subtlety of mind - indeed, very little cognitive complexity - is required to play this particular game. But the price that is paid for the absence of conceptual precision and understanding is a progressive accumulation of correlational data for which no cogent explanations can be found.

In practice, the proliferation of correlational data leads to a progressive

fragmentation of the overall research field - the sort of fragmentation in which hundreds of correlational studies get conducted and reported in cheerful disregard of one another. Since the assorted findings never quite seem to tie up with one another, and since the correlation coefficients have values which tend to differ, often rather cryptically, from one study to another, there is also likely to be a growing sense of despondency about the possibility of making "real progress". The claim being made here is that this state of affairs is unlikely to change until researchers wake up to the need to give really careful attention to the conceptual foundations of the research activities that they engage in. As already pointed out, however, researchers are all too often protected from recognising this need. For the reasons already stated, it is too easy to correlate test scores in respect of X and Y without ever being compelled to ask more penetrating questions about the deeper nature and genesis etc. of X and Y. The result of all this superficiality is a population of researchers who can happily go on computing correlations between X and Y, without ever being able to say, with precision and incisiveness, what X and Y are.

These are damaging criticisms, and more needs to be said about them. For the moment, however, the priority task is to examine just a few more examples of the ways in which previous researchers have tended to define cognitive complexity, to satisfy ourselves that the accounts of workers like Lichtenberg & Heck (and Castiglione as well) truly are typical of the genre. We will therefore bring this section of the chapter to a close by taking a look at the sorts of definitions that have been offered by Vannoy, Bieri, Scott, and (most recently of all) Schneier.

To some extent, the views of Vannoy (1965) have already been dealt with. As indicated in chapter 3, Vannoy begins his paper by characterising cognitive complexity as "a variable which influences people's perceptions and evaluations of events". In the sentences that immediately follow, he goes on to say:

"Although various writers have given somewhat different meanings to the concept of cognitive complexity, it has generally been postulated that some persons are prone to employ few dimensions when they perceive and evaluate

stimuli, or are inclined to make only very gross discriminations among dimensions of meaning. Other persons are believed to employ many dimensions and/or to make fine discriminations along the dimensions they employ.

In many of these investigations cognitive complexity has been conceived as a disposition to view the person-objects in one's social environment in a complex or differentiated fashion. Other writers have implied that cognitive complexity-simplicity is a quite general trait pervading all realms of cognitive functioning. Finally, some writers ... have raised viewed complexity as a somewhat less enduring state applying only to a particular cognitive domain that has been made salient."

This account of cognitive complexity is substantially more careful and more literate than that of Lichtenberg & Heck. It avoids the mistake of restricting cognitive complexity solely to the interpersonal domain. And we can hardly accuse Vannoy of ubiquitously conceptualising cognitive complexity as "a construct". Within the space of two small paragraphs, it is variously characterised as a variable, a concept, a disposition, a trait, and a state! However, a careful reading of Vannoy's paper suggests that these different characterisations of cognitive complexity are not a result of his being ultra-sensitive to conceptual matters. Rather, they are a consequence of his desire to hedge his bets as to what cognitive complexity "really" is. Overall, essentially the same kinds of conceptual muddles are present.

For example, Vannoy explicitly calls attention to the existence, in the literature that he reviews, of "a wide variety of possible measures of cognitive complexity". However, Vannoy does not see this state of affairs as being one that calls for conceptual clarification. It does not seem to occur to him that, if he took the trouble to decide how cognitive complexity might best be conceptualised, he might actually be able to slot all these different measures into place, and (even better) elucidate the different senses in which they might all legitimately claim to be measures of "the same thing". Instead, Vannoy's method is to take no less than 20 measures - all of which might "have something to do with" cognitive complexity - and apply the lot to a hapless captive audience of 113 undergraduate male subjects. He then secures the usual correlational

data and factor analyses in the hope that the resulting factors will somehow speak for themselves. The result is an inconclusive set of factors and arguments which collectively seem to make a confused situation even more confused. Vannoy manifestly has great difficulty in saying what his results mean and, at the very end of his paper, there is a somewhat extraordinary (almost desperate) final sentence which reads as follows:

"The type of behaviour exhibited in tests of cognitive complexity may be, as Gardner and Schoen (1962) attest, simply one aspect of a more general characteristic of human thought usually referred to as concept formation."

However, if this is what Vannoy genuinely believes or suspects, research into cognitive complexity would appear to have been a largely misconceived waste of time. At the very least, there would seem to be a pressing need to reappraise the whole notion of cognitive complexity - and even to ask whether psychological theory might not be better off without it. However, this would to a large extent be a conceptual enquiry. Since researchers like Vannoy tend to eschew such enquiries, it should come as no surprise to learn that Vannoy does not attempt to reappraise his initial characterisation of cognitive complexity, in spite of the fact that its validity is plainly undermined by his own findings and arguments and (above all) by the very last sentence of his paper.

If we now turn to the work of James Bieri, we find ourselves considering what is almost certainly the largest single body of research on cognitive complexity. Bieri first started to publish papers on cognitive complexity as early as 1955. His interest and involvement in the topic persisted for well over 10 years, during which time he enlisted the help of several different co-workers and research assistants. Schneier (1979) cites 5 of the better-known papers published by Bieri and his colleagues. There are others as well. And there is also a book (Bieri et al., 1966) which incorporates Bieri's mature reflections on the subject.

In view of Bieri's sustained interest and output, it might be hoped that his views

about cognitive complexity would be less vulnerable to criticism. Unfortunately, this is not the case. Initially, Bieri did get off to quite a promising start, by invoking the Personal Construct Theory of George Kelly (1955). In effect, Bieri sought to assess cognitive complexity in terms of the number of "personal constructs" that people use in their evaluations of other people. And it here needs to be noticed that the word 'construct' is here being used (following Kelly) in yet another sense - to denote a linguistic dimension of the judgement (such as good/bad, trustworthy/treacherous, and so on) which people might use to describe and/or evaluate the personality or behaviour of others.

On the credit side, this approach promised to enrich the notion of cognitive complexity, by giving it a distinctively linguistic flavour. However, this potentially rich conceptualisation was rapidly debased by the concern that Bieri had to convert his data into numbers that could in turn be converted into correlations. By 1966, Bieri was essentially characterising cognitive complexity in the way that Castiglione describes - namely, as "a tendency to construe social behaviour in a multidimensional way..." At the end of the day, it is no travesty to say that, for Bieri, cognitive complexity is to be construed as the tendency (a) to notice more things (e.g. about other people), and (b) to inter-relate these things in more intricate ways.

In passing, it is worth remarking that devotees of Personal Construct Theory are by no means impressed by the ways in which researchers like Bieri have "adapted" Kelly's ideas to suit their own ends. Bannister & Mair have the following politely-dismissive things to say:

"The uses of construct theory ideas ... have inevitably been modified by traditional psychological assumptions and research methods. Some will approve of this process ... while others may fear that the distinctive features of (Kelly's) new approach may become blurred and only a lowest common denominator retained. Bieri seems to hold this first (approving) view."

"... A marked characteristic of (the work of researchers

like Bieri) is the increasing tendency, as the studies proceed, to view cognitive complexity-simplicity as a trait. ... The habits of trait psychology seem to have led the experimenters from an initial observation about the mathematical structure of a single grid to a position where they speak of individual persons as being, in a generalizable and long term sense, either cognitively simple or cognitively complex and as occupying a relatively fixed position on the dimension. In contrast, construct theory stresses that the structural qualities of a construct system change continuously over time with the varying validation fortunes of expectations derived from the constructions."

(Bannister & Mair, 1968, page 208.)

There is a clear implication, here, that researchers like Bieri have effectively devalued the ideas and theories of George Kelly. Elsewhere in the Bannister & Mair book, there are additional comments of a condemnatory kind. On page 70, Bannister & Mair explicitly mention the research of Bieri and others and remark that "untested assumptions and loose arguments abound in this area of study". Later, on page 103, they refer to the various different measures that exist of cognitive complexity, and say:

"Care must be taken to specify the procedures involved in defining measures, and particular caution exercised in generalising across measures based on similar, though not identical, procedures, and across procedures with identical names but dissimilar forms."

These cautionary remarks are very much to the point. Bannister & Mair obviously regard cognitive complexity research as being in rather a sorry state, and they attribute this (as tactfully as they can) to the fact that trait psychologists are simply not thinking straight. Towards the end of their book (pp.209-210), Bannister & Mair describe two pieces of research which seem to them to provide a fairly clear repudiation of the trait psychologist's generalized notion of cognitive complexity-simplicity. They then twist the knife for the last time:

"Each of the major constructs described in construct theory ... could be treated in a trait fashion similar to that favoured by Bieri. Such a trend would be a negation of Kelly's view of these constructs as dimensions in terms of which people change. He did not regard them as categories for pinpointing static "types".

(Bannister & Mair, 1968, underlining added.)

Admittedly, Bannister & Mair have a vested interest in trying to ensure that Kelly's ideas are not unduly devalued, abused, undermined, or misrepresented, etc. In defence of Bieri, it might be argued that he is fully entitled to adapt Kelly's ideas to his own ends, if he thinks that such an adaptation might prove fruitful. There is some truth in this. But the fact is that, after more than 10 years of work on the topic of cognitive complexity, Bieri et al (1966) provide no convincing evidence that the adaptation was fruitful. As already indicated, the conducting of correlational studies tends to extend, rather than deepen, knowledge. As more correlations get found, more talking points get made, and there is more speculation as to what might be correlated with (or caused by) what, and why. But these sorts of discussions all tend to be in the nature of "flying kites". And although kite flying is inevitable in pioneering papers of the kind produced by Barron (1953), there must surely be something seriously wrong with a research programme if kite flying is still one of the most conspicuous features of papers being published in the area over 10 years later.

Research programmes that run on shaky conceptual foundations inevitably run into trouble. They always achieve less than they originally promise. Their eventual fate is to get bogged down to the point where researchers quietly abandon them in favour of alternatives that look more promising. This seems to have been the fate of Bieri's own research programme. Recognising the difficulties that such programmes can encounter, other researchers naturally tend to cast around for better ways of proceeding. In other words, they look for ways of erecting somewhat different research programmes on somewhat different conceptual foundations. This is what Scott (1962, 1963) tried to do.

His first independent venture into the field of cognitive complexity was an attempt to relate cognitive complexity to "cognitive flexibility". His opening words were as follows:

"Cognitive complexity is defined as the number of

independent dimensions-worth of concepts the individual brings to bear in describing a particular domain of phenomena; it is assessed with a measure of information-yield based on an object-sorting task. Cognitive flexibility is defined as the readiness with which the person's concept system changes selectively in response to appropriate environmental stimuli; it is assessed by inviting the subject to expand the groups he has created on the original sorting task. In general, the greater a subject's cognitive complexity, (a) the greater is the likelihood that he will expand the groups, and (b) the greater is his tendency to gain information (i.e. dimensional complexity) by the expansion..."

(Scott, 1962, verbatim.)

This cryptic summary is largely clarified in the paper itself. Overall, it is an original-looking conception. Scott's basic method was to get his subjects to sort the main Nations of the world into separate groups, on the basis of their perceived similarities and differences. If a subject were to insist on sorting the Nations into just two groups (e.g. "The Super-Powers" and "The Rest"), he would be labelled as cognitively simple, because he apparently had only one dimension of discrimination that he could bring to bear on the task. In contrast, other subjects might have many different dimensions of discrimination - allowing them to come up with a variety of different sorts, and a variety of different reasons that could be articulated for each of the sorts chosen. These latter subjects would of course be described as cognitively complex.

This is an ingeniously-simple experimental set-up. It enabled Scott to compute some quite clever information-theoretic measures of information yield and complexity. It is also of historic interest to researchers like Bannister & Mair, because Scott's sorting task was one which permitted, but did not necessarily require, the subjects to verbalise the bases on which they were making their sorts. In this respect, it was the first experiment of its kind.

The question that has to be asked, however, is whether Scott's sorting task is convincing as a measure of cognitive complexity. In many respects, it looks more like a

test of divergent thinking. The kind of mentality which can come up with the numerous ways of sorting Nations into groups does not seem to be too far removed from the kind of mentality that can come up with numerous different uses for a brick. And if we pause to think of people whom we would naturally feel inclined to describe as cognitively complex - people such as taxation experts, Grandmasters of chess, socio-economic planners, entrepreneurial businessmen, and so on - it is somewhat lacking in credibility to claim that the cognitive complexity of these kinds of people can be adequately and reliably sensed by the simple sorting task that Scott devised.

We are back, therefore, to much the same starting point. In spite of appearances to the contrary, Scott's conceptualisation turns out to be yet another version of the view that cognitive complexity is basically to do with (a) the number of things that people notice (e.g. about the Nations of the world), and (b) the intricacy of the relationships that exist among the things that are noticed. And, even here, there is some equivocation - both in Scott and in Bieri - with respect to (b). Whereas Lichtenberg & Heck are at least clear that (a) and (b) are both essential defining attributes of the cognitively complex person, Scott and Bieri come close to attributing cognitive complexity on the basis of (a) alone.

For example, Scott's definition of cognitive complexity focusses largely on what he describes as the number of "dimensions-worth of concepts" that can influence a person's way of describing a given domain of phenomena. The expression in italics ("dimensions-worth of concepts") is by no means clear. But, insofar as it refers to what other researchers prefer to call "dimensions of discrimination and/or judgement", it is surely pertinent to ask further questions about the ways in which such dimensions might be organized (to use the Lichtenberg & Heck term) or inter-related. It is well-known, for example, that thinking is greatly complexified when matters under consideration are inter-related in non-linear and/or discontinuous ways, and when there are unresolved ambiguities or indeterminacies or areas of ignorance (e.g. areas of concern in which our

ability to make useful and relevant discriminations breaks down). There is obviously more to cognitive complexity than just being in possession of more dimensions of discrimination. But Scott's conceptualisation makes almost no provision for this. Specifically, his interest in inter-relatedness goes no further than enquiring whether, and to what extent, his "dimensions-worth of concepts" are independent of (i.e. not correlated with) one another. Bieri's approach is just as unsatisfactory in this respect, because he also seems to think that being more cognitively complex is mainly a matter of having more personal constructs at one's disposal. We are therefore being slightly charitable when we credit Scott and Bieri with holding the view that cognitive complexity is basically to do with both (a) the number of things that people notice, and (b) the intricacy of the relationships that exist among the things that are noticed. The conceptualisations of Scott and Bieri (and of many other researchers as well) are slightly more impoverished than this, because the (b) component, which addresses the matter of intricacy, tends to be dealt with in only the most superficial way.

Let us turn, finally, to the comparatively recent paper by Schneier (1979). This paper was written some 25 years after the appearance of Barron's 1953 paper, but its content testifies to the fact that mainstream conceptualisations of cognitive complexity have changed very little in a quarter of a century. Schneier reviews and discusses the contributions of previous researchers (Bieri, Scott, Vannoy, and about 20 others) in a largely uncritical way. His only major concern is to point out that "empirical evidence for the psychometric soundness of the instruments used to measure cognitive complexity ... is both scant and conflicting". In an attempt to do something about this state of affairs, he then describes a few experiments which, among other things, aim at assessing "the convergent and discriminant validates" of some of the measures that previous researchers (in particular, Bieri and his associates) have used. Schneier summarises his feelings in the following way:

"An empirical investigation of the psychometric properties of a commonly-used instrument to measure cognitive complexity was designed. Bieri's (Bieri, Atkins, Briar,

Leaman, Miller, and Tripodi, 1966) grid form of Kelly's (1955) Role Construct Repertory (REP) Test was shown to have high and statistically significant test-retest reliability ($p < .001$) and convergent and discriminant validities ($p < .05$). These results reinforce the internal validity of cognitive complexity research using the instrument."

This is cheering news for Bieri supporters. Anyone who is presumptuous enough to criticise the Bieri Test can henceforth be silenced by the assurance that the test has been found to have "good psychometric properties and satisfactory internal validity". But what would such an assurance mean?

The existence of test-retest reliability does not in itself tell us that the Bieri test is a satisfactory measure of cognitive complexity. It tells us only that test scores tend to be stable from one application of the test to the next. The computation of "convergent and discriminant validities" is likewise a teacherous business, which can often turn out to mean very little.

In plain English, what happens is this. If a researcher like Bieri devises a test which is said to measure "cognitive complexity", we can reasonably expect two things to happen. First of all, there should be (a) a good positive correlation between scores on Bieri's test and scores on other tests that also claim to be measuring cognitive complexity. Secondly, there should be (b) an absence of correlation (or even a negative correlation) between scores on Bieri's test and scores on other tests that claim to be measuring different things. If (a) is found to be the case, the test is said to have CONVERGENT VALIDITY. And if (b) is found to be the case, the test is said to have DISCRIMINANT VALIDITY. Case (a) is what psychometricians describe as "confirmation by independent measures". Case (b) is what psychometricians describe as "lack of positive correlation between instruments which are meant to tap different theoretical constructs".

There is, however, a snag. Throughout the whole of this section of the thesis, we have been urging the view that researchers like Bieri and Scott and Vannoy and others have all tended to conceptualise cognitive complexity in much the same erroneous

and inadequate way. In such cases as this, there may indeed be a modicum of "convergent validity" - but this might only be telling that all the tests have similar kinds of defects. Similar doubts can be raised in respect of Schneier's discovery of "discriminant validity". If, as we have argued, researchers like Bieri and Scott and Vannoy have conceptualised cognitive complexity in too narrow or specialised a manner (so that their tests do not, in effect, measure anything very coherent at all), it is only to be expected that scores on these tests will fail to correlate with scores on tests that (to use the standard terminology) are "seeking to tap different theoretical constructs". Viewed in this way, the discovery of low but significant levels of convergent and discriminant validity does not mean what Schneier takes it to mean. What Schneier's findings do suggest (according to our analysis) is that the various tests of cognitive complexity that he considered all embody the same kinds of erroneous assumptions as to what cognitive complexity is.

Having said all this, it is worth noting that some of Schneier's correlations look decidedly odd. At one point in his paper, for example, he says:

"Convergent validity was shown with Scott's (1962) measure of complexity, $r = -.19$, $p < .05$, a measure designed to tap the same construct via a different method..."

Apart from the fact that this correlation is low (and, hence, is significant only by virtue of the size of Schneier's sample), it appears to be running in the wrong direction! However, it is difficult to reach a definitive judgement on this point, because Schneier reports his findings in a somewhat parsimonious way. What is clear is that Schneier has embarked on a validation enquiry without first giving sufficient thought to the validity of his own validation procedures. If the conceptualisations of Bieri, Scott, Vannoy, and

others (e.g. Lichtenberg & Heck, and Castiglione) are as defective as we have suggested, the only effect of Schneier's work is to obscure and entrench such defects. The announcement that Bieri's test has all the right psychometric properties is one that will simply diminish criticality and encourage other researchers to persist with research that may well be fundamentally misconceived.

Definitional Error and its Implications

In their attempts to arrive at satisfactory definitions of new scientific terms, theoreticians sometimes seem to vacillate between extreme carelessness and extreme caution.

For example, some theorists seem to take the view that, in their capacity as scientists, they are free to define new terms in any way they choose. Their attitude seems to be that, provided they give a reasonably clear account of what they mean by a given term, that is all that is needed. At the other extreme, however, there are theorists who seem to be forever agonising about "the precise meaning" of the terms that they use. It is as if they think that there are unique and absolutely-correct definitions lying around and waiting to be found, if only they had the ability and the patience to discover them.

These two views, which are almost diametrically opposed to each other, are both in error. The carefree "anything goes" approach is wrong because it is simply not true that scientists are free to define terms in any way that they like. It would be absurd, for example, to define cognitive complexity as a special kind of guided missile. And no brewery is ever likely to produce a new brand of beer called "Cognitive Complexity". Definitions of this kind would be a flagrant abuse of English, because there is no etymological continuity between the definiens and the definiendum. It would likewise be almost as crass to define cognitive complexity as "a state of emotional confusion". Whilst emotional confusion (or conflict or turmoil) might sometimes be present in the

cognitive complex person (i.e. it might be a frequent concomitant condition), we cannot say that cognitive complexity is a state of emotional confusion. If we were to make such an assertion, we would be tacitly repudiating a whole tradition of psychological thinking which requires us to think of emotion as being different from cognition.

The reason that we cannot (or should not) define terms in any way we please is that our choice of words always has implications that need to be considered in a wider context. It is necessary to study these implications, in order to satisfy ourselves that they are acceptable.

Suppose, for example, that Frank Barron had chosen, some 33 years ago, to define cognitive complexity as "the tendency to use long words when called upon to explain the ordinary everyday behaviour of other people". In its own narrow way, this definition is actually not much worse than that of Lichtenberg & Heck. No doubt such a definition would have provoked some heavy theoretical discussion as to whether it was better to count long words, or words of more than two syllables - and whether it might also be appropriate to include short words (such as 'drive' and 'set') if they were being used in a technical sense. There might also have been arguments about the desirability of counting the absolute number of long words, rather than (say) the proportion of long words to short words. And so on. Either way, there would have been no great difficulty in securing "test measures", and no trouble at all in getting a completely different sort of bandwagon rolling. If events had proceeded in this way, the present thesis would be reviewing a completely different set of correlational data, factor analyses, validation coefficients, and the like - all reported under precisely the same heading of "Cognitive Complexity".

It is important to recognise that arbitrary conceptualisations, of the kind just described, cannot possibly be correct. And the reason for this is that psychology has already established a nexus of key terms such as cognition, conation, affect, etc., whose

meanings and inter-relationships must be respected, if psychology is ever to develop a coherent body of theory. There is no way, even in principle, in which a coherent body of psychological theory can develop, if different researchers and theorists use the same words in ways that are partially at odds with one another. Researchers and theorists who exercise their freedom to define terms in any way that happens to suit their own convenience are, in the long run, simply ensuring the fragmentation of psychological science. They are creating bandwagons that can roll forever, but only in comparative disregard of one another. In the long term, no overall coherence is possible.

At the same time, however, we must avoid the opposite tendency to think that, for any given term, there is only one "correct" or "best" definition. This point needs to be made because it is not uncommon to find psychologists who seem to believe (for example) that the traditional definition of INTELLIGENCE - namely, the ability to perceive (or educe) relevant relationships - is just about as perfect as it could possibly be.

As it happens, the definition of intelligence that has just been cited is quite a good one, precisely because, in the wider context, it has no obviously unacceptable implications. However, alternative definitions have been proposed from time to time, and one standard dictionary of psychological terms (by Chaplin, 1975) gives the following:

1. The ability to meet and adapt to novel situations quickly and effectively.
2. The ability to utilize abstract concepts effectively.
3. The ability to grasp relationships and to learn quickly.

Chaplin goes on to say:

"The three definitions are by no means independent; they merely emphasize different aspects of the (same) process. In spite of the prevalence of intelligence testing, psychologists have found it difficult to define intelligence precisely... Most of the psychologists who developed the early tests side-stepped the problem of the precise nature of what they were measuring and attempted to make their scales good predictors of scholastic achievement...

(Generally, they tended to fall back on the position that) intelligence is what intelligence tests measure..."

This is a fair summary of some of the ways in which professional psychologists have tended to construe intelligence over the years. And there would be very little point in arguing about which is "the best" way, or (worse) which is the "uniquely correct" way. Within limits, they are all acceptable. The fact that there is no uniquely correct way of defining intelligence does not, however, imply that we can construe intelligence in any way we please. Suppose, for example, that Binet had originally defined intelligence as "the ability to solve mathematical problems". As in the case of the Lichtenberg & Heck definition, we could say at once that such a definition could not possibly be right. Among other things, we would immediately have to invent a different term (other than 'intelligence') for the ability to solve non-mathematical problems. This would in turn have various knock-on consequences of an unacceptable kind. For example, only the mathematically adept would be characterised as intelligent. And a potentially false distinction would have been introduced into the language of psychology, since two different terms would then exist to refer to what is generally believed to be the same ability. It is clear that the generation of false distinctions is a positive obstacle to the development of any coherent body of psychological theory. And this is why we cannot allow researchers like Lichtenberg & Heck (and Bieri and others) to theorise about cognitive complexity in ways which are demonstrably untenable.

Even so, a surprisingly large number of theoreticians do seem to believe that they are entitled to define theoretical terms in any way they please, provided they make their usage clear. Since much of the Lichtenberg & Heck definition is not even clear, this particular excuse will not work in their case. But there is sometimes a further assumption that rough-and-ready definitions do not matter, because science is essentially self-correcting - so any initial errors of definition will eventually be discovered and corrected in the light of later systematic experimentation. There are two kinds of remarks that can be made about this sort of assumption.

1. Even if science were self-correcting, there is little to be said in favour of

starting with a definition which can be shown, with only a little thought (and without the need for any prior experimentation at all), to be defective. No systematic experimentation is required to see that definitions of the Lichtenberg & Heck kind are riddled with defects. All that is needed is a feel for the nature of science, and for the meaning of words, and for the implications of what it is that they might be trying to say. Why start with a definition that is manifestly wrong when, with a little more effort, it is possible to start with a definition that looks as if it might actually "hold up"?

2. Such evidence as there is suggests that science is all too often not self-correcting. Certainly, there is nothing inherent in scientific activity that renders it rapidly self-correcting. Indeed, one reason why scientists seem to reach an impasse, or get bogged down, in their scientific endeavours is that they are simply not able to identify (or extricate themselves from) the errors that are bringing them to a standstill. As Lewis (1981) has pointed out, errors that go uncorrected tend to become entrenched. Error overlays error until, finally, a state of no-progress is reached. It is therefore particularly important to try to identify and correct errors at the earliest opportunity. And this is exactly what researchers like Lichtenberg & Heck (and their predecessors) fail to do. In their bustling enthusiasm to construct tests, do experiments, and factor analyse their results etc., they fail to notice the trouble that they are building up, for themselves and for psychological science as a whole, by their failure to attend to the conceptual bases of their busy actions.

Three "Test" Cases

If someone (a young child, for example) were to define a horse as a 4- legged animal that is over 5 feet high, we could cast doubt on the credibility of the definition in two ways. We could first of all point to elephants, bison, giraffes, etc. And we could also point to horses that are less than 5 feet high. The definition would then be seen to be doubly defective. If taken literally, it would accept as horses a whole variety of

creatures that, on closer reflection, we would not wish to regard as horses. If taken literally, it would also reject (as not being horses), some creatures - young fillies, for example - that we do indeed wish to regard as being horses.

All definitions are vulnerable to two types of error. They can either be "too loose" - and, in so being, categorise non-instances as being valid instances (e.g. categorise elephants as being horses). Or they can be "too restrictive" - and, in so being, categorise valid instances as being non- instances (e.g. categorise young fillies as being not horses).

We have already pointed out that definitions of the Lichtenberg & Heck (and Bieri) kind are too restrictive, in that they restrict cognitive complexity to the interpersonal domain. But they are also too loose, in that they categorise as being cognitively complex people whom we would normally not wish to regard as being cognitively complex. It is appropriate, therefore, to look at this second kind of error, the error of looseness, a little more closely. And the way to do this is to see how definitions of the Lichtenberg & Heck kind "match up" against some judiciously-chosen imaginary cases.

Let us begin, then, by considering the cognitive state of an ordinary housewife who is wandering around a supermarket doing the weekend shopping. Let us suppose that the housewife has about 30-40 items of shopping that she is "bearing in mind". And let us also suppose (reasonably enough) that these 30-40 items are all highly organized and inter-related in her own thinking, in virtue of the dishes that she is intending to prepare for her family. In other words, she wanders around the supermarket saying to herself things like, "I need to get X and Y and Z, because these are all essential ingredients in so- and-so. But if I cannot get Y, I might have to make do with P and Q instead, and then I probably will not need quite as much of R or Z..."

In terms of the Lichtenberg & Heck definition, this lady would appear to be

attending to, and thinking about, a large number of things. And the things in question are surely being considered in an organized fashion. It can hardly be denied that substantial numbers of "dimensions of discrimination and evaluation etc." are being "employed" - and employed in a well-integrated way. Is the housewife therefore behaving in a cognitive complex way? On a literal interpretation of the Lichtenberg & Heck definition, the answer would appear to be an unqualified "Yes". But most people (including, in all probability, the lady herself) would probably answer with a resounding "No". To the accomplished cook, there would seem to be nothing the least bit complicated about a typical excursion to a supermarket. What, then, has gone wrong? What features of the supermarket situation make us reluctant to say that the housewife is displaying cognitive complexity? And what implications does this example have for the kind of definition offered by Lichtenberg & Heck?

Before probing these questions further, let us add two more test cases to our list.

Let us next imagine the case of an experienced rally driver who races cars around tortuous country and mountain roads, and who does this in all kinds of road and weather conditions. Such a person is obviously responding in a sensitive way to a wide range of visual and auditory and kinaesthetic cues. There is clearly a large number of dimensions of discrimination and evaluation involved. And these dimensions are obviously organized (to use the Lichtenberg & Heck terminology) in a tightly controlled way. On a literal interpretation of the Lichtenberg & Heck definition, the rally driver is surely exhibiting cognitive complexity. What is more, the rally driver is being cognitively complex on Bieri-type definitions as well. If ever there was a clear-cut example of rapid multi-dimensional information processing, this must surely be it!

Finally, let us consider the case of a group of monkeys playing with one another among the treetops of a jungle. This must surely be a good analogue of the rally driver

situation. There is the same kind of "intelligent anticipation and wariness", for example. Each monkey is not just swinging, in a random fashion, to any branch that happens to loom in front of him. Rather, he is swinging to a branch that is (a) likely to bear his weight, and (b) likely to keep his options (for subsequent directions of movement) open by leading to other branches that will also bear his weight. As the monkeys play and chatter in synchrony with one another, and as they move en bloc in a semi-purposive way, and as they also remain (presumably) on the alert for assorted hazards/predators, they are obviously sensitized to a rich variety of visual and auditory and kinaesthetic cues. The fluency and adaptability of their actions also suggests that the relevant dimensions of discrimination and judgement are very well integrated. There is again no lack of rapid multi-dimensional information processing. So, according to both Bieri and Lichtenberg & Heck, we must presumably credit each monkey with being cognitively complex in situations of this kind.

Here, then, are three "test cases" - the housewife in the supermarket, the rally driver, and the monkey in the trees. If the definition of Lichtenberg & Heck (and also of Bieri and others) is to be taken at its face value, the housewife and the rally driver and the monkey must all be deemed to be exhibiting cognitive complexity. Is this really an acceptable conclusion?

When I first started to ponder questions of this kind, it seemed obvious to me that the conclusion was not acceptable. With some reluctance, I might have conceded that the housewife was showing some signs of cognitive complexity in her trip around the supermarket. For example, I could imagine her dithering and hesitating at certain points, while she weighed up (in her own mind) a whole range of factors to do with (a) the ingredients for her proposed dishes, and (b) the prices of the relevant ingredients, and (c) the quality and freshness of the goods on display, and (d) whether or not the prices were fair, and (e) how long alternative ingredients might take to prepare, and (f) the fads and fancies of the people she was going to cook for, and (g) whether or not she

had enough room in her shopping bag, and (h) how heavy it would all be to carry, and so on. When factors of this kind repeatedly enter into one's considerations, there are elements of cognitive complexity in the decision making. However, the shoe begins to pinch a little when we are asked to attribute cognitive complexity to a rally driver who would normally be described (by the fraternity of professional psychologists) as exhibiting nothing more than a skilled psychomotor performance. And it is even more difficult to attribute cognitive complexity to monkeys who appear to be functioning in an almost purely instinctive fashion.

Looking Deeper

If a young child were to define a horse in the manner described in the last section (i.e. as a 4-legged animal over 5 feet in height), even the most lowly teacher would know how to cope with such a situation. He would simply show the child non-horses (e.g. elephants) that are over 5 feet high, and genuine horses (smaller breeds, fillies...) that are under 5 feet high. The remedial procedure is one that almost any young child is likely to be able to understand. It consists in getting the child to see that his erroneous definition "lets in" creatures which, on closer reflection, he would not really wish to let in. And it also excludes certain creatures which, on closer reflection, he would not really wish to exclude.

The question that needs to be asked is why on earth researchers and theoreticians in the field of cognitive complexity have never thought it appropriate to run similar child-like tests on their own definitions? To the best of my belief, there is not a single paper, anywhere in the field of cognitive complexity research, that sets up the sorts of "test cases" that have just been described. Instead, researchers like Schneier go to great lengths to compute recondite-looking validity coefficients - without ever first enquiring whether their definitions and conceptualisation withstand even the simplest and most straightforward and most natural of tests.

Presumably, some researchers would wish to say that our three tests (the housewife, the rally driver, and the monkey) are "not fair". Bieri supporters might argue, for example, that rally drivers and monkeys do not have (or are not using) Kelly-type "personal constructs". And Scott might argue that monkeys would never be able to participate in his task of sorting the Nations of the world into groups. Objections of this kind would, however, be specious. Among other things, we might note that monkeys could not take the Ravens Progressive Matrices Test - but that does not imply that monkeys have no intelligence. With respect to Bieri, we might also note that he himself does not use personal constructs in the strict Kelly sense. The truth of the matter is that for Bieri, as for Scott and most other researchers in this field, the essence of cognitive complexity is the number of dimensions of discrimination and/or judgement that subjects use in their attempts to cope with certain kinds of challenges. This being so, it is entirely fair to insist that, by the criteria of these researchers, the housewife and rally driver and monkey do qualify as being cognitively complex.

If this last conclusion is unacceptable (as I believe it is), the matter is one that needs to be sorted out, rather than brazened out. There is no point in researchers getting defensive or angry, or claiming that their views have been parodied or misunderstood, etc. The only civilised response is to say something like:

"Yes, I can see that past definitions of cognitive complexity have been as leaky as a sieve. Yes, I can see that many of them have been too restrictive in that they have tended to construe cognitive complexity as an almost exclusively interpersonal phenomenon. And I agree that, even when a particular definition, such as Vannoy's, has not been so exclusionary, it remains true that researchers have generally failed to investigate anything other than the interpersonal aspect. And Yes, I can see now that references to such thing as "the number and organization of dimensions..." are much too vague, and that the vagueness is never rectified in the main body of the papers that these researchers produce. I also agree that, in quite a few cases, researchers have tended to concern themselves only with the "number" of dimensions, and have virtually ignored the matter of the way in which a cognitively complex person might "organize" such dimensions. I also agree that, even when both components (i.e. number and organization) are considered, the whole issue is obscured

by a failure to say what a dimension is, and a failure to take any account at all of such matters as non-linear relationships and discontinuities that might arise as between one dimension and another. Finally, I agree that, because of the vague and light-weight manner in which researchers tend to talk about "dimensions of discrimination and/or evaluation etc.", their definitions do indeed attribute cognitive complexity to the housewife in the supermarket, the rally driver, and the monkey in the trees..."

This would of course be a very humbling sort of confession to make, and it would effectively call in question almost all the research that has ever been done in the area. No doubt correlation addicts would say that a lot of thought-provoking correlations had been found. And if this is regarded as being adequate consolation for having moved so far and so persistently in the wrong direction, it would be tactful not to argue the point. Perhaps the most polite thing that can be said is that, somewhere along the way, cognitive complexity research took "a wrong turn". The task is now to try to reorientate it in a more promising direction. And one way of beginning to do this is to look around for circumstances/situations in which the attribution of cognitive complexity would seem to be unequivocally justified.

Some Typical Instances

Appropriate circumstances/situations can fairly easily be called to mind. For example, the whole domain of socio-economic planning is one that appears to involve high cognitive complexity. And if we examine the convoluted writings of certain sociologists (Talcott Parsons, for instance), the theories and conjectures that they fabricate likewise seem to require a high level of cognitive complexity. More generally, numerous professions (the Law, for example) seem to demand cognitive complexity of their practitioners. To take just one example, the Law of Taxation is almost impenetrable, these days, to the average layman. The writings of philosophers, theologians, literary critics, and social commentators can also reveal high degrees of cognitive complexity. At a more mundane level, entrepreneurs in the business world

need to be cognitively complex when they are planning large-scale take-over bids. Much the same can be said of negotiators in the Common Market. As previously mentioned, there is even a high level of cognitive complexity involved in playing (e.g. at grandmaster level) a game such as chess.

Here, then, is a fairly non-controversial list of "typical instances" of cognitive-complexity-in-action - a list of circumstances/situations which most people would willingly (and, I suspect, almost unanimously) describe as calling for cognitive complexity. The list is obviously not complete. We might have included such items as military planning, the breeding of rare plants or animals, the trouble-shooting of complex electronic equipment, and so on. It is also possible to identify activities that seem to call for cognitive complexity, but at somewhat lesser levels of intensity. Most kinds of everyday planning fall within this category - planning a holiday abroad, planning for retirement, planning a new extension to one's house, and so on. Planning for contingencies of one kind or another is quite a common everyday human activity. And Juniper (1976) offers a rich variety of hints/guidelines/heuristics for helping people to tackle such problems more effectively.

What do all these "typical instances" have in common? And how do they differ from the example of the monkey swinging through the trees? There are several pertinent points to be made.

First of all, each of our typical instances involves, without exception, the distinctively human process of reasoning - reasoning, that is, via the extensive use of humanlike language and symbol systems. As monkeys swing through the trees, we might well concede that they are engaging in what Bieri and others describe as multidimensional information processing. But the expression "information processing" should not delude us into thinking that the monkeys are reasoning in a humanlike way. The fact is that, whenever we think of what seem to be clear-cut examples of cognitive

complexity - when we think, for example, of socio-economic planners, business entrepreneurs, grandmasters of chess, and so on - we are thinking of situations which call for the kind of humanlike language system that makes possible the marshalling and comparison of relevant data, the formulating of hypotheses, and drawing of conclusions, the making of decisions, and so on. If we are wanting to attribute cognitive complexity only to examples of this "clear-cut" kind, we are asserting (in effect) that cognitive complexity is essentially a linguistic phenomenon.

Secondly, all of the "typical instances" that we have cited also involve the kind of reasoning process that requires the reasoner to take account of a substantial number of relevant "considerations" or "themes" or "topics". And this does not seem to be quite the same as the bringing in (or "employing") of what people like Lichtenberg & Heck describe as a substantial number of "dimensions of discrimination and evaluation". When we observe the mode of working of a competent socio-economic planner or lawyer or entrepreneur, what often impresses us is the amount of material (e.g. the number of "considerations" or "themes" or "topics") that such people are able to introduce into their reasoning. For example, a good socio-economic planner will at some time or other think about such things as the quality of life, environmental conservation, noise levels, the organizing and financing of relevant facilities, and so on. And each of these "things" is very much more, and very much richer, than what writers like Lichtenberg & Heck choose to describe as "a dimension or possible meaning..". What we have tentatively described as a consideration or theme or topic (the topic of environmental conservation, for example) is itself an immensely complicated gestalt. At the very least, such a topic must be constituted out of a richly-integrated system of dimensions of possible meaning. But it is clear that the language of "dimensions of meaning" can hardly begin to do justice to a satisfactory elucidation of what a topic is.

Finally, we must note that cognitive complexity is not just a matter of bringing in a substantial number of considerations or topics into account in a "light-weight" or

superficial sort of way. When the socio-economic planner takes economic considerations into account, he is obliged to look into the salient economic factors in some depth and, just as importantly, without getting lost. In other words, the considerations that he brings to bear on his socio-economic planning have a depth and intricacy which he must somehow be able to penetrate, and come out of, without losing track of his overall goal. This is even true of a grandmaster of chess. Such a person must, in certain situations, be able to contemplate a variety of possible strategic plans. And each of the strategic plans must be "gone into" to the requisite depth and with the requisite precision. At the same time, cross-comparisons must be run as between one possible strategy and another, so that the most promising-looking strategy can eventually be selected as the one that the player would be best advised to adopt. Similar comments hold, of course, in respect of the business entrepreneur contemplating or master-minding a large take-over bid.

If the last three paragraphs are taken seriously, they would seem to present a radical challenge to all existing conceptualisations of cognitive complexity.

In the first of our three paragraphs, we departed from conventional definitions of the Lichtenberg & Heck kind by explicitly associating cognitive complexity with man's unique ability to REASON. Since humans reason with the help of language (ordinary language, together with specially constructed scientific and technical and mathematico-logical languages), this view imparts a very definite LINGUISTIC flavour to the concept of cognitive complexity. Whatever else cognitive complexity might be or do as a phenomenon, it must surely play a significant role in the linguistic or "symbol manipulating" activities that people engage in.

In the second of our three paragraphs, we next called attention to what might suitably be described as a BREADTH OF CONTEXT factor. Roughly speaking, this is to do with how wide-ranging a person's "pattern of relevant associations" is, when that

person is trying to come to grips with some problem. It is to do with how much material the person can effectively "bring in" as being pertinent to the discussion that he is having (either with himself, or on paper, or with another person, or via some alternative interface). A person who sees large numbers of different considerations/themes/topics etc. as being relevant is a person who has breadth of context.

In the last of our three paragraphs, we finally called attention to what might suitably be described as a DEPTH OF NESTING factor. Roughly speaking (again), this is to do with how deeply a person can "dive into" various facets of a topic without getting lost. The challenge is to be able to probe and dig into any topic that is perceived as being possibly relevant, and to be able to emerge again - preferably with some useful tentative conclusions, and without having lost sight of the over-arching goal that inspired the problem in the first place. The point being made here is that the cognitively complex person does more than bring in a diversity of possibly-relevant considerations/themes/topics etc. He additionally has the ability to investigate such topics in some depth (namely, a depth which allows him to arrive at, and emerge with, helpful provisional conclusions). In other words, the various topics that the cognitively complex person brings into consideration in his reasoning are not of a superficial, ill-digested, or shallow kind. Where necessary, they have real substance. They have enough content and structure and significance (to the person concerned) to enable him to make worthwhile investigations, and to do so without any serious risk of confusing himself.

A Single-Sentence Definition

What, then, is cognitive complexity? Since "basic" definitions traditionally tend to be only one sentence long, what single sentence can we come up with which will convincingly "capture the essence" of cognitive complexity?

Perhaps it is worth remarking that there is no compelling reason for going along with the convention that a single-sentence definition is required. Effective communication takes as long as it takes. If three sentences are needed to make an important point clear, then three sentences should be used. We also remark that if moral philosophers are asked questions like "What is Justice?", their answer is likely to be a whole book - followed, in all probability, by yet more books. Even so, there is some aesthetic satisfaction in trying to arrive at a single-sentence definition. If the essence of some phenomenon or concept cannot be captured in a single sentence, skeptics might be forgiven for wondering whether there is any clear-cut essence to be captured at all.

The attempt to meet this challenge required a great deal of thought, and I will not even begin to list the 20-30 candidate definitions that I formulated and (eventually) rejected. At the end of the day, my very best effort is as follows:

Cognitive Complexity is the name given to a mode of mental functioning that arises when an attempt is made to solve unfamiliar problems by bringing a variety of different considerations to bear upon them.

The significance of the above definition resides partly in what it says, and partly in what it carefully refrains from saying. A brief commentary is therefore in order.

(1) Strictly speaking, psychological terms and expressions can never be anything more than linguistic tools. They function, along with other linguistic devices, to help us talk about psychological phenomena of interest to us. The word is not the thing. It is a way of naming.

Not many psychologists bother about such niceties. It is very common, for example, to hear intelligence defined as something like "the ability to perceive relevant relationships". But intelligence is literally only a word (a noun). It cannot be the ability itself. In the interests of precision, it would therefore be better to define intelligence as "the name given to the ability to perceive relevant relationships". Words like

intelligence, or cognitive complexity, can name or point to or refer to certain phenomena. But they cannot be the phenomena. In keeping with the viewpoint, our definition of cognitive complexity tacitly notes that "cognitive complexity" is only a two-word expression. So we have chosen to describe it as the name given to a certain kind of mental functioning. We have therefore avoided the suggestion that it is a certain kind of mental functioning.

(2) The point that we have just made is not a major one. But it is not trivial either. The fact is that a great deal of confusion can arise if theoreticians fail to distinguish clearly between the phenomena that they are studying, and the names that they give to such phenomena. In spite of this, psychologists will no doubt continue to say that intelligence is an ability, rather than a way of naming such an ability. In like manner, they will presumably go on suggesting (according to their whims and inclinations) that cognitive complexity is a trait, or a disposition, or a variable, or whatever - rather than a name that they are choosing to give to a trait or disposition, etc. In the interest of brevity, reference to names tends to get dropped. No great harm results from this, providing we bear in mind the fact that the dropping is no more than a conventional short-hand "manner of speaking". From time to time we shall adopt this convention, without apology, ourselves.

(3) Our insistence on characterising cognitive complexity, intelligence, and so on, as names does however have one special advantage. It holds open the possibility of switching to different and possibly better names at some time in the future. If we consider, for example, what most people characteristically mean by Intelligence, we find that they are not in general focusing on the ability to perceive relevant relationships. It is rather the case that intelligent people are reckoned to be good at distinguishing the true and helpful from the false and unhelpful. In challenging situations, they seem to be able to distinguish the essential from the inessential.

The possibility therefore arises that what is currently named as intelligence might at some future date be more usefully re-named as discernment. But the possibility of changing long-standing terminology, in the light of scientific progress, is available only to people who understand that names are not sacrosanct.

(4) The foregoing remarks are germane to the attempt, in our single- sentence definition, to associate cognitive complexity with a certain kind of mental functioning. At first glance, it might seem more accurate to define cognitive complexity as the name given to a certain kind of cognitive functioning. But the truth is that there is more to cognitive complexity than "mere" cognition. If a person is trying to bring a variety of different considerations to bear upon some problem, there is obviously a certain amount of effort or striving going on. Probably there is conscious resistance to distraction as well. In short, the bringing to bear of different considerations necessitates the exercise of will-power. To use a somewhat old-fashioned term, there is conation as well as cognition. Nor is this all. In the course of struggling with such a problem, a variety of feelings and evaluations will be brought into play. Feelings of frustration, irritation, and the like, if the problem turns out to be unexpectedly tough. And feelings of pleasure, satisfaction, and the like, at the prospect of a final break-through. Background anxieties, hopes and fears, all testify to the continuing additional presence of emotion or affect. In recognition of all this, our definition deliberately speaks of mental functioning, rather than cognitive functioning. And this adds strength to our previous remarks about the possible re-naming of phenomena. Perhaps there will one day come a time when theoreticians realise that cognition and conation and affect are all inextricably bound up with one another. If such a time ever comes, expressions like cognitive complexity may give way to more general expressions such as mental complexity.

(5) Notice, next, that our definition carefully avoids describing cognitive complexity as being the name for an ability, or construct, or disposition, or trait, or information-processing variable, etc. What it says is something more straightforward.

In essence, it states that if a person is bringing a variety of different considerations to bear upon the problems that confront him, then that person is ipso facto functioning in a cognitively complex manner.

What this means is that cognitive complexity is construed (in our definition) as being a necessary and immediate consequence of trying to solve problems in a particular kind of way. In the very act of trying to bring a variety of different considerations to bear upon some problem or problems, a person automatically goes into a cognitively complex mode of functioning. If we so desired, we could emphasise this point by adding the words 'of necessity' to our definition. Cognitive Complexity would then be defined as "the name given to a mode of mental functioning that arises of necessity when an attempt is made to solve unfamiliar problems by bringing a variety of different considerations to bear upon them".

(6) According to our definition, cognitive complexity is a necessary and immediate consequence of trying to solve problems in a particular way - namely, by bringing a variety of different considerations to bear upon them. By implication, we might add that cognitive complexity, as we have defined it, is also a pre-condition for trying to solve problems in such a way. A person who is unable to bring a variety of different considerations to bear upon a given problem is not capable of exhibiting or experiencing the kind of cognitive complexity that we are talking about. Such a person may well exhibit or experience confusion, impotence, frustration, and the like. But his/her cognitive processes, with respect to the problem in question, will be essentially simplistic and even (perhaps) child-like. If the problem, cannot be handled in a comparatively simple (e.g. routinised) way, it cannot be handled by that person at all. Our definition therefore has a tacit symmetry built into it. No ability to bring multiple considerations to bear upon a problem implies no ability to be cognitively complex with respect to that problem. And vice-versa.

(7) There may of course be several simplistic ways of trying to solve difficult-looking problems. We can call for help, throw a tantrum, make threats, offer bribes, try a lucky guess, apply some simple dogma or algorithm. And so on.

Cars do occasionally start if we kick them, and one way of coping with an impossible boss is to shoot him. Simplistic responses may well give (or seem to give) results that look quite promising, at least in the short run. But they do not involve the bringing to bear of multiple considerations, so they do not call for the kind of cognitive complexity that our definition speaks of.

(8) In the light of these remarks, it is possible to glimpse circumstances under which it might, after all, be "not unreasonable" to characterise cognitive complexity as some kind of ability or trait. If we consider any major social issue - teenage crime, poverty, inflation, etc. - we can hardly fail to notice how simplistic some people (including many politicians) are in comparison with others. For some politicians, the problem of teenage crime is one that could be solved by making sure the culprits are caught, and then punishing them more severely. And the problem of poverty can be solved by taxing the rich and abolishing nuclear weapons. Inflation poses no great problems either. All we have to do is make sure we improve our competitive position in the market place. These are not parodies. As a result of watching people trot out solutions of this kind, time and time again, the thought might occur to us that they simply have no ability (or no disposition) to bring multiple considerations to bear upon such problems.

As a further example, let us imagine that we are in a position to watch a high-powered socio-economic planner at work over a period of several years. And suppose we discover that on innumerable occasions he (a) brings a multiplicity of different considerations to bear upon the problems he is faced with, and (b) invariably manages to come up with impressive-looking solutions which actually work. Again, we

might be tempted to regard his cognitive complexity as a sort of ability or "gift". Such a conclusion would be urged upon us by the feeling that some people can bring multiple considerations to bear upon complex problems, whereas others either cannot or will not.

(9) The construal of cognitive complexity as a certain kind of ability - or, less objectionably, as the name given to a certain kind of ability - does not in any way invalidate our proposed single-sentence definition. When asked what kind of ability it is, we reply that it is the kind of ability that is demanded of any person who attempts to solve unfamiliar problems by bringing a variety of different considerations to bear upon them. In this sense, our definition stands as the essence-capturing statement of what cognitive complexity is.

Similar comments can be made in respect of other characterisations. Clearly, our definition is not in any way invalidated by the assertion that Cognitive Complexity is (say) a "research topic". If we ask what sort of research topic it is, our single-sentence definition provides the essence-capturing answer.

(10) The point to be noticed is that our definition deliberately strives to be "robust" against seemingly-awkward objections and counter-examples. For example, the definition deliberately avoids making any comment about the propriety or appropriateness of bringing multiple considerations to bear upon various sorts of problems. Socio-economic planners are virtually obliged, much of the time, to bring a variety of different considerations to bear upon their problems. But this is not necessarily true of (say) a boss trying to deal with a troublesome employee. It may be the case that the best way of handling the matter is for him to be entirely open and straightforward. But some bosses seem to be incapable of behaving in such a way. They agonise about what they should say, they imagine all sorts of things that might go wrong with the interview, they get into a defensive frame of mind before the employee even walks through the door. And so, by bringing to bear a whole variety of

unnecessary (and counterproductive) considerations to bear upon the problem they over-complicate and foul up what might otherwise have been a simple and easy-to-resolve matter.

Our definition makes no judgement at all about this sort of happening. It merely states what seems to us to be the case - namely, that if a person attempts to solve some problem by bringing a variety of different considerations to bear upon it, then that person is ipso facto exhibiting cognitive complexity, irrespective of whether or not the problem objectively needs to be handled in such a manner. Incidentally, this is one of several reasons why our definition refrained from characterising cognitive complexity as an ability. By general consent, an ability is generally regarded as being "a good thing". But there is nothing particularly good or commendable about marshalling a whole variety of considerations to cope with problems that are in fact amenable to simple solutions. People who behave in this way could justifiably be described as complicators. They display a quite unwarranted "wariness" in dealing with what are actually quite simple matters. Such people are certainly exhibiting cognitive complexity, but the cognitive complexity in question can hardly be described as an ability. It is more indicative of lack of ability.

(11) As early as chapter 1, we suggested that there might be more than one kind of cognitive complexity. Specifically, we distinguished between (a) the kind of incisive cognitive complexity that leads in the direction of clarity, and (b) the kind of muddleheaded cognitive complexity that leads in the direction of confusion. Our single-sentence definition deliberately encompasses both of these possibilities. Irrespective of whether the person concerned is incisive or muddleheaded, the fact that he is bringing a variety of considerations to bear is sufficient reason for asserting that he is being cognitively complex. In case (a), he is being cognitively complex to good effect. In case (b), he is being cognitively complex in a floundering sort of way.

What this means is that our definition deliberately leaves scope for further elaboration. As knowledge about cognitive complexity increases, it will be open to researchers to distinguish (if it seems appropriate) between effective cognitive complexity and ineffective cognitive complexity. Under such a distinction, the former might reasonably be characterised as an ability, and the latter as a liability. If we bear in mind the point already made about "naming", researchers might additionally come to the conclusion that ineffective cognitive complexity would be better described as cognitive perplexity. These possibilities all lie in the future. The point to be noted is that our definition is not in any way pre-emptive. It does not rule such possibilities out.

(12) When I first tried to arrive at a satisfactory single-sentence definition, I seriously considered defining cognitive complexity as a state of mind - namely, the state of mind that a person is in, when he is striving to solve problems by bringing a variety of different considerations to bear upon them. I eventually decided against this characterisation (a) because the expression "state of mind" seemed to have a rather static feel about it, and (b) because it is not satisfactory from the standpoint of an external observer. The point is that for the person who is being cognitively complex, cognitive complexity is an experience that he is actually going through. It will certainly seem like a distinctive "state of mind" to the person involved.

To an outside observer, however, cognitive complexity is more in the nature of an attribution. (A rough analogy here is provided by considering a toothache. Toothache is an experience, often of a particularly painful kind, to the sufferer. But it is not a painful experience to the external observer.) The challenge, then, is to find a form of words which would be appropriate both for the person who is being cognitively complex, and also for the observer of such a person. The expression "mode of mental functioning" seems to fit the bill almost perfectly. The person who is experiencing cognitive complexity can agree that he is experiencing a distinctive mode of mental functioning. And the outside observer can likewise attribute a distinctive mode of mental

functioning to anyone who appears to be bringing multiple considerations to bear, etc. Our single-sentence definition therefore encompasses the standpoints of both parties.

(13) Enough has been said, perhaps, to convince the reader that our definition has been carefully chosen. Even so, it may be worth looking a little more closely at some of the words used. To refresh the reader's memory.

Cognitive Complexity is the name given to a mode of mental functioning that arises when an attempt is made to solve unfamiliar problems by bringing a variety of different considerations to bear upon them.

We have already dealt at some length with the opening part of this definition - the part which characterises cognitive complexity as "the name given to a mode of mental functioning". So we shall not say anything further, here, about these particular words. The word 'arises' has also been dealt with, at least implicitly, by our claim that cognitive complexity necessarily arises, or comes into being, in the very instant of trying to bring multiple considerations to bear upon problems.

The word 'attempt' is deserving of comment. Let us note that when a person is said to be problem-solving, this does not necessarily imply that he is actually solving problems. All that it means is that he is attempting to solve problems. Our definition deliberately captures this nuance, because it carries no implications concerning the success or otherwise of such attempts. According to our definition, a person, who attempts to solve problems by bringing a variety of different considerations to bear upon them is a person who is (by that very fact) being cognitively complex - irrespective of whether or not his attempt is successful.

The word 'unfamiliar' also calls for comment. The first point to be noticed is the obvious negative correlation between familiarity and cognitive strain. The greater our familiarity with a given problem, the smaller the cognitive strain involved in coping (or

attempting to cope) with it. Consider, for example, the predicament of a person who is taking his first driving lesson. So many things to remember, so many things to take into consideration.... It all seems impossibly complicated and, from the standpoint of our definition, the learner driver is indeed being plunged into a cognitively complex condition. With practice, however, the requisite considerations can all be mastered. The experience of cognitive complexity fades, and is replaced by the confident feeling of having acquired a fluent skill.

These comments effectively "solve" the rally driver problem mentioned earlier in this chapter. The point is that all aspiring learners (not just aspiring rally drivers, or aspiring tennis players) experience cognitive complexity in the early stages of learning, whenever such learning calls for a variety of different considerations to be brought to bear upon the task that they have set themselves. But skills of the rally driver kind all have one vital ingredient in common. They all involve the phenomenon of recurrence. This enables the salient considerations to be mastered in a piecemeal fashion, by a process of repetition and trial and error and corrective feedback. To an uninformed layman, every mountainous racing track might look different. But to the experienced rally driver, they are all, in all respects that matter, the same. If this were not the case - if, for example, a rally driver were suddenly to encounter a stretch of road containing patches of quicksand, and hidden spikes, and electric cables strung across the road at a height of 2-3 feet - he would soon notice the difference. If he lived that long.

The transition from hesitant/uncertain cognitive complexity to fluent skilled performance depends crucially upon the extent to which relevant circumstances recur. This is an important point because there are some circumstances and professions in which recurrence is largely absent. Presumably a politician or a socio-economic planner might be given a whole series of tasks in which every task involves a radically different set of considerations. Such a person would never be able to "routinise" his problem-solving behaviour in the manner of the experienced rally driver, because each new task

would (by virtue of its unfamiliarity) plunge him into a new kind of cognitive complexity. If he were to encounter some task for which he was unable or unwilling (e.g. through lack of time or knowledge or ability) to bring the requisite considerations to bear, he would of course be obliged to shift into one of the more simplistic modes of functioning mentioned earlier. Politicians often do this by such devices as delegating, setting up advisory committees, calling for reports from Civil Servants, and/or generally crudifying the issues that matter.

There are some interesting intermediate cases. Consider, for example, the writings of Agatha Christie. The putting together of a coherent detective story obviously requires a substantial variety of considerations to be brought to bear on matters to do with content, plot, relationships between Key characteristics, the laying of false trails, the nature and style of document, the addition of "general interest" (titillation) features, and so on. To this extent, the whole enterprise is a cognitively complex one. Admittedly, the level of cognitive complexity is to a large degree under the control of the author. For example, Agatha Christie's characters have very little depth. The major emphasis is always on a story line in which there is a tantalising mix of indications and counterindications. The question to be asked is whether, as the years went by, the task of writing detective stories became increasingly easy for Agatha Christie? Did each new story plunge her into agonising depths of cognitive complexity, or was she able to "routinise" the process in the way that Barbara Cartland (for example) seems to routinise the churning out of romantic novels?

The point is this. Whereas some kinds of tasks have all the appearance (to outsiders) of requiring considerable cognitive complexity, the people who tackle such tasks successfully are sometimes able to do so because they operate at a level of abstraction which enables them to eliminate or "cut through" much of the seeming complexity. What looks like a really difficult piece of problem solving is actually nothing more (to the person concerned) than the exercise of a well-polished skill. For all

that we know, detective stories that Agatha Christie wrote in her later years may have posed very few problems at all. For her, the tackling of a new story may have seemed as simple and routine a task as that of a professional chef preparing a new dish. We cannot safely assume that what looks like an unfamiliar task to us will also look unfamiliar and difficult and cognitively complex to an accomplished expert.

Clearly, there is more to this word 'unfamiliar' than meets the eye. Its use in our definition begs a substantial number of questions. And this is again deliberate, because it is in the nature of all well-considered single-sentence definitions that they should provoke questions and explorations of the kind just considered.

Let us finally note, then, that the word, 'unfamiliar' should be construed as "not adequately understood by the aspiring problem-solver". It is this lack of understanding that makes the sensitive problem-solver aware of the need to search for, and investigate, relevant considerations. Once again, this needs to be said because people differ in the way in which they construe the word 'unfamiliar'. For example, many people would say that inflation is a familiar problem - in the sense that everybody keeps on hearing about it. According to our usage, however, it is a problem that seems not to be adequately understood by anyone. And this makes it an unfamiliar problem. It is this unfamiliarity (i.e. unfamiliarity with the requirements of the problem) that induces cognitive complexity in any person who tried to take it seriously, rather than flippantly or superficially.

(14) If we now pass on from the word 'unfamiliar', we find that the next word in our definition is 'problems'. The attentive reader might wonder why we have put this word in its plural form. Our answer is that, from a psychological standpoint, there is generally no such thing as a single problem. The fact is that problems beget problems. In the very act of addressing what might seem to be a single problem (the problem of Inflation, for example), all sorts of questions are likely to "come to mind". These

questions are (in effect) additional/supplementary problems that spill out of our consideration of the initial problem. If we are addressing an unfamiliar problem - i.e. a problem which is not (at least in its early stages) adequately understood - this automatically guarantees that we have a plurality of problems on our hands. Hence the adoption, in our definition, of the plural form.

(15) Finally, we come to the last part of the definition - the part which speaks of "the bringing to bear of a variety of different considerations". This is the most succinct expression that I could find to convey something of the already-mentioned notions of breadth of context and depth of nesting. If we were wanting to give a single-sentence definition of what we previously described (albeit tentatively) as effective cognitive complexity, our chosen expression would possibly be rather too succinct. It would be desirable to expand it in various ways, to cover the points that we earlier made about (a) bringing a variety of relevant considerations to bear, and (b) investigating such considerations to "appropriate depths", and (c) doing this without getting lost and without losing sight of the original goal, so that we could finally (d) emerge with a seemingly-satisfactory solution.

However, we have gone to some trouble, over the last few pages, to stress that our definition is not intended to be a definition solely of "effective" cognitive complexity. It is meant to be a concise essence-capturing definition of "cognitive-complexity-in-general". For this avowedly-general purpose, our formulation would seem to be entirely satisfactory. It would of course be possible to modify or expand our proposed definition to cover particular kinds of cognitive complexity. For example, we might offer a definition of effective (e.g. incisive and/or successful) cognitive complexity, along the lines indicated in the previous paragraph. We might also attempt a definition of ineffective (e.g. confused and/or unsuccessful) cognitive complexity. We might additionally attempt definitions applicable to (a) the interpersonal domain, and/or (b) the technological domain, and/or (c) the cultural domain. And so on. But these are all in the

nature of qualifications or "special cases". The priority task is to secure a reasonable-looking definition of cognitive-complexity-in-general. And this is what our single-sentence definition tries to achieve.

(16) These remarks effectively conclude what we originally described as a "brief commentary" on our single-sentence definition. Although the commentary has extended over some 20 pages, it has indeed been brief in comparison with what might have been said. Many quite significant points have been dealt with in only 1-2 paragraphs apiece. If the commentary strikes the reader as being excessively long, this may be due to the fact that most researchers seem to spend almost no time at all on their definitions. We therefore repeat our claim that psychological theory and research can progress in a coherent and orderly fashion if and only if their conceptual foundations are prepared with the greatest possible care. Researchers who try to build on shaky foundations, with rough-and-ready definitions that cannot possibly be right, can always busy themselves with what we have described as "the correlation game". But, as the correlational findings built up in the literature, the overall picture will (if we are honest) gradually look more and more confused - with the result that most researchers will tend to leave the area after having made only a few light-weight sorties into it.

In the field of Cognitive Complexity, this state of affairs has been confirmed again and again. The empirical findings have been unclear and inconclusive. The main actors - Barron, Bieri, Scott, Vannoy, and others - have quietly left the scene. Research programmes have gently fizzled out. And so on. Our contention is that this pattern will continue until someone takes the trouble to get the conceptual foundations right. If this can be done, researchers will at least be clear about what they should be trying to do, and why they should be trying to do it.

The Relationship of Re-conceptualised Cognitive Complexity to Cognitive Style

At this point in the discussion of the re-conceptualisation of cognitive complexity, the question arises as to how it relates to other constructs which researchers have used to describe methods of mental functioning.

A relevant and widely used construct is "cognitive style".

"Cognitive style" refers to self-consistent and enduring individual differences in cognitive organisation and functioning. The term refers both to individual differences in general principles of cognitive organisation (simplification and consistency trends) and to various self-consistent idiosyncratic tendencies (intolerance for ambiguity; memory for particular kinds of experience) that are not reflective of human cognitive functioning in general....."

(Ausubel and others, 1978, page 203.)

Cognitive style in this sense reflects differences in personality organisation, as well as differences in cognitive capacity and functioning.

The most elaborate work on cognitive style is that of Witkin and others (1977).

Several essential characteristics of cognitive styles in general are identified:

- (a) "... cognitive styles are concerned with the form rather than the content of cognitive activity. They refer to individual differences in 'how' we perceive, think, solve problems, learn, relate to others, etc. (page 15.)

For Witkin, this characteristic has implications for the educational setting, and a student's personality with respect to how they learn. Witkin defined cognitive style in process terms which he described in detail, along with suggestions for ways of teaching students to use problem-solving strategies more appropriate to their styles, and to shift to strategies more suitable for the task at hand than their preferred strategies.

- (b) "They cut across the boundaries traditionally - and, we believe, inappropriately - used in compartmentalizing the human psyche and so help restore the psyche to its proper status as a holistic entity." (page 15.)
- (c) "...they are stable over time." (page 15.)
- (d) "...with regard to value judgements, cognitive styles are bipolar." (page 16.)

This last characteristic is particularly important, because it distinguishes cognitive styles from intelligence and other ability dimensions. With an ability like intelligence, it is better to have more rather than less of it. However, with cognitive styles, each pole has adaptive value under specified circumstances, and so may be judged positively in relation to those circumstances. The neutral character of cognitive styles, deriving from their value bipolarity, make it very much easier to inform a student about his individual cognitive style, than it does to tell him about his IQ score.

There is an analogy here from research into approaches to learning, which is closely related to work on cognitive styles. Marton and Saljo (1976a, 1976b) identified two levels of processing in learning ("approaches to learning" Entwistle and others 1979a) from texts, a surface approach concentrating on the form of the text, and a deep approach concentrating on the method. Laurillard (1979), however, found that students displayed both approaches according to their perceptions of the demands of the learning situation.

Tomlinson (1981) summarizes this approach.

"...cognitive styles (or cognitive strategies, learning styles, learning strategies as they are called) refer to more restricted preferences, tendencies, perhaps habits, in aspects of information - processing across a variety of content domains - but this distinction is far from absolute, for cognitive styles have implications for personality and behaviour in general, and for learning in particular ... " (page 244.)

This definition of cognitive style raises the issue as to whether cognitive style is a relatively permanent trait, or whether people use different styles according to their perceptions of the needs of different situations. Earlier, I have mentioned that cognitive

complexity is consistent across a variety of domains. The issue of the consistency of cognitive complexity i.e. a person who is cognitively complex in one area is likely to be cognitively complex in another area is discussed later (page 195). However, I have pointed out that from my own observation of people in different situations in everyday life, some people can be cognitively simple in their approach to, for example, nuclear disarmament, but cognitively complex with respect to their hobby, for example, propagating a particular variety of tomato plant. It may well be that people are cognitively complex or cognitively simple, depending on the situation in which they find themselves.

More significant in relating the construct of cognitive style to re-conceptualised cognitive complexity, is its bipolarity. Witkin and others contrasted field dependence with field independence, Svensson (1976) holistic/atomistic approaches to learning, Pask (1975a, 1975b, 1976), Pask and Scott (1972) serialist and holist learning styles, Guilford (1971) convergent/divergent thinking, Kagan and others (1963) reflection/impulsivity. The critical issue in this context is this, is re-conceptualised cognitive complexity a cognitive style with a complex/simple bipolarity?

At this stage it is helpful to remind ourselves of how re-conceptualised cognitive complexity is defined.

"Cognitive Complexity is the name given to a mode of mental functioning that arises when an attempt is made to solve unfamiliar problems by bringing a variety of different considerations to bear upon them."

Note firstly, the broad relationship with the construct of cognitive style, cognitive complexity is a "mode of mental functioning". It does not, however, fit the bipolarity pattern. Re-conceptualised cognitive complexity describes a very different dimension of mental functioning. Not an option, or an ability or a construct in the sense used by Bruner (1956), or even a frame of reference or a plan (Miller and others 1960), but a predisposition that arises when a person attempts to solve unfamiliar problems by

bringing a variety of different considerations to bear upon them. In this situation, a person can be, or can exhibit signs of being a cognitively complex holist, or a cognitively complex serialist, or they can exhibit cognitively complex field dependence, or cognitively complex field independence. If we take terminology used by Kagan and others (1963), a person can exhibit cognitively complex reflection, or cognitively complex impulsivity, or they can exhibit (to use Guilford's terms), cognitively complex convergence or cognitively complex divergence. These kinds of cognitive complexity relate to the breadth of context and depth of nesting factors, which were mentioned earlier in the chapter.

The holist, the independent, the reflective or the divergent person will possibly be able to bring in more pertinent points to a discussion (breadth of context), than the cognitively complex serialist, or dependent, or impulsive or convergent person. He may also be able to discuss a topic in some depth without getting lost (depth of nesting). This exercise would be more difficult for a person who is, for example, a cognitively complex serialist, or field dependent, or impulsive or convergent in their approach to solving problems. Cognitive complexity is thus a different dimension to that of cognitive style, and the definition developed for its re-conceptualisation, can be applied to the majority of cognitive styles identified by major workers in the field. These relationships offer scope for major research work.

Range of Applicability

One characteristic of a "good" definition is that it should demark a seemingly worthwhile and significant area of enquiry. The point is an important one because there is little to be gained by demarcating areas of only minor interest. For example, millions of people grow houseplants. But it would seem odd to try to develop a theory of houseplanting behaviour. However carefully we defined the behaviour of growing houseplants, our definition would simply not delineate a worthwhile area of

psychological enquiry. It would not have the sort of generality or significance that would mark it out as deserving of systematic study.

If we ask about the kind of area delineated by our definition of cognitive complexity, we can see that the range of applicability of the definition is very wide indeed.

(1) First of all, cognitive complexity is manifestly present in all non-trivial (e.g. moderately sustained and serious) forms of theorising. Theorising, whether formal or informal, invariably requires the bringing to bear (on whatever it is that is being theorised about) of a variety of different considerations. Similar comments apply to the closely-related activity of scientific/symbolic model-building. It follows that a vast amount of philosophical and methodological literature of the kind produced by Popper, Carnap, Nagel, Hanson, Feyerabend, and many others - on the nature of theorising, on the processes of confirmation and disconfirmation, on the logic of discovery, and so on - is relevant to a fuller elucidation of what cognitive complexity is, and what it involves. We shall make no attempt to pursue this here further in this thesis.

(2) The domain of cognitive complexity is not, however, coterminous with the domain of theorising and model-building. Governmental Commissions of Inquiry (e.g. into pornography, surrogate motherhood, the location of new airports, and so on) likewise call for multiplicity of considerations to be brought to bear. So also do mass media discussions of such trivia as the morals and life-styles of pop stars, or the appropriateness of exposing former Russian spies, or the rights and wrongs of sending a Rugby team to South Africa. In general, any kind of sustained speculation, or pro-ing and con-ing, is likely to provoke a barrage of considerations that various people think should be brought to bear on whatever matter is under discussion. The correspondence columns of the so-called "serious" weekly magazines and newspapers regularly exemplify this point.

(3) As we have already indicated, the writing of books is an exercise in cognitive complexity. For some writers - professional philosophers, or novelists like Tolkein - the cognitive complexity involved often seems to be incredibly intense and highly sustained. For pulp-fiction writers, who shall be nameless, the cognitive complexity is presumably very much less. For me, the writing of this thesis certainly felt like an exercise in sustained cognitive complexity! But this is not intended to be a self-congratulatory remark. It is an observation which no doubt holds true of any piece of writing in which care needs to be taken in identifying and sifting through a wide variety of considerations.

(4) Numerous other examples of cognitive complexity come to mind. We have already remarked on the cognitive complexity that needs to be shown by socio-economic planners. In fact, all serious planning call for the exercise of cognitive complexity, because it is in the very nature of serious planning that multiple considerations must be brought to bear on the relevant problems. For similar reasons, all acts of sustained intellectual interpretation - the kinds of interpretation offered by psychoanalysts, literary critics, political and social commentators, and so on - characteristically require the bringing to bear of multiple considerations. And we have already mentioned additional examples such as the business entrepreneur organizing a take-over bid, an arbitrator or negotiator immersed in some industrial dispute or legalistic wrangle, or a chess player struggling with a difficult position. Obviously, there is no possibility of coming up with an exhaustive list of occasions for which cognitive complexity is required. But we have surely said enough to convince the reader that our definition of cognitive complexity covers a very wide and non-trivial range of phenomena and circumstances. Cognitive Complexity, as we have construed it, is not the tiny backwater that it has sometimes appeared (in the hands of people like Scott, Vannoy, and Lichtenberg and Heck) to be.

A Biological Limitation

The point that we have just made can be significantly strengthened by associating cognitive complexity with a non-contentious Biological Limit on Man's ability to process information.

Man has only finite information-processing capabilities. There is a limit to how much information he can cope with at any one time. If he is faced with an unfamiliar problem which (by virtue of its unfamiliarity) he is unable to solve "at once" - i.e. almost instantaneously - he must invariably break it down into appropriate parts which he can solve in piecemeal fashion. Problem-Solving Theorists describe this as the process of decomposing or partitioning the original "presenting problem" into sub-problems. If necessary, the sub-problem must themselves be further partitioned or broken down into sub-sub-problems - until the component problems are small enough to be brought within Man's finite information-processing capabilities. There then follows a systematic piecing together of the solutions obtained of the sub-problems and sub-sub-problems, etc., until (eventually) a solution is constructed for the original problem.

This last paragraph is, however, just another way of talking about the solving of unfamiliar problems by bringing to bear upon them a variety of different considerations. The search for relevant-looking considerations is in fact nothing less than the search for ways of breaking the original problems down into manageable components. And it is the Biological Limit on Man's information-processing capacity that necessitates this search. If Man's information-processing capacity were more God-like - if there were some drug that could expand it one thousandfold - problems which now plunge us into a state of cognitive complexity would be solvable at a glance. There would be no need to wrestle with dozens of different considerations because the dozens of considerations would all be within our immediate span of comprehension.

Looked at from this point of view, Man's ability to reason can be seen as his way of trying to transcend the upper biological limit on his ability to process information. This limit ensures (as every learner-driver discovers) that unfamiliar problems can never be solved at a glance. But, in the case of human beings, there has evolved a possibly unique way of overcoming this difficulty. It takes the form of a linguistic reasoning system which enables such problems to be tackled "a piece at a time", by the expedient of bringing relevant-looking considerations to bear upon them.

If these arguments are valid, they immeasurably strengthen our conviction that Cognitive Complexity, as we have defined it, is an important and significant phenomenon. This is so because we can now see it as an inevitable consequence of Man's attempt to transcend unavoidable biological limitations on his information-processing capabilities. So far as we know, no other creature has evolved in this way - although Dolphins and certain primates appear to have moved some distance (not yet fully determined) along this evolutionary path. Animal psychologists have for many years been placing lower animals in "problematic" situations (Skinner boxes, mazes, jumping stands, and the like). But none of these animals has ever exhibited anything like Man's ability to struggle, via his powers of reason, with the unfamiliar. This ability seems to be unique to Man. And cognitive complexity is the price that we necessarily pay, sometimes willingly and sometimes grudgingly, for this unique ability.

Struggling with the Unfamiliar

Our re-conceptualisation of cognitive complexity would seem to be getting stronger all the time. It is getting stronger in its own right, as more and more arguments and talking points are adduced in favour of the definition that we are proposing. It is also getting stronger in comparison with definitions of the kind offered by Bieri, Scott, Vannoy and others - definitions which, at the end of the day, do little more than associate

cognitive complexity with the possession of "more dimensions of discrimination".

If we wanted one short phrase to capture the essence of cognitive complexity in slightly different (but entirely compatible words, the most appropriate phrase that comes to mind is "struggling with the unfamiliar". As we have just tried to show, no other living creature comes anywhere near to Man's ability to do this. What is more, our 4-word expression has the merit of again being free to value judgements. A person who is struggling with the unfamiliar is ipso facto in a state of cognitive complexity, irrespective of whether or not his struggling is successful.

If we look at the Animal Kingdom as a whole, and if we observe animals in their natural habitat (i.e. not Skinner boxes, or circuses, or domesticated conditions), there is one striking characteristic that they all seem to have in common. Everything that they do seems to "come naturally" to them. This is why their behaviour is so frequently described as instinctive. The faltering behaviour of infant animals is no less instinctive than that of mature adults. Everything seems to run like clock-work.

If we now turn to Man, the situation could hardly be more different. Almost everything that Man does, from the time that he gets out of bed in the morning until the time that he retires at night, has to be learned. Getting dressed, preparing breakfast, doing the washing up, going to work, practising some trade or profession - everything like this needs to be acquired. At some stage in the growing up process, we have to get accustomed to behaving in such ways. It is this that involves us in coming to grips with varying degrees of unfamiliarity.

There are just a few behaviour patterns that do seem to come naturally to Man. But these all seem to be simple, almost reflexive, behaviours. We instinctively try to correct our balance if we begin to fall (e.g. on a stairway). We give fairly automatic responses to loud noises, and blinding flashes of light. But examples of this kind are

comparatively rare. What distinguishes Man from all other creatures is his seemingly-unique ability to break away from the kinds of instinctive pressures that bind all lower animals to an essentially common pattern. Within any given species, the grip of instinct holds the species in a fixed mold. In contrast, Man has powers of reason, powers of mental model-building and symbol manipulation, which enable him to build and take advantage of new knowledge. But new knowledge seldom comes easily. It necessitates a coming to grips with what is initially unfamiliar. This is the basic predicament of Man, and it is a predicament which demands cognitive complexity.

What we now have, therefore, is a conceptualisation of cognitive complexity which is firmly anchored to Man's seemingly-unique ability to break free from the paralyzing grip of animal-like instincts. We have tried to capture the quality of this essentially-human gift by saying that Man is able to struggle, very often successfully, with the unfamiliar. However, we have not quite equated cognitive complexity with this kind of struggling, because there are some kinds of unfamiliarity which do not require multiple considerations to be brought to bear upon them.

Consider, for example, the problem of multiplying 3841 by 7298. This problem is unfamiliar in the sense that the problem solver is unlikely to have encountered it before. But it is familiar in the sense that it belongs to a general class of problems (namely, problems of multiplication in arithmetic) that he probably does know how to handle. Consider, also, the problem of adding up a long column of figures. This is not the sort of problem that can be solved "at a glance". On the other hand, anyone who is reasonably numerate should have no difficulty at all in getting the right answer. Although such problems have unfamiliar features, they do not require multiple considerations to be brought to bear upon them. Our inclination, therefore, is to say that they do not involve cognitive complexity. What we are really dealing with here is the kind of problem that can be handled by the routine application of some appropriate skill or algorithm. In such cases, it might well be appropriate to speak of the need for

cognitive care. And there might also be an element of cognitive strain in trying to add up a column of figures while (for example) the telephone is ringing. Our original one-sentence definition draws the line, however, against conceding the presence of cognitive complexity in such situations.

It may be timely, here, to make two further points.

First of all, notice that it is Cognitive Complexity - rather than, say, Intelligence - that is being highlighted as a particularly-distinguishing characteristic of Man. Intelligence, construed as the ability to perceive relevant relationships, etc., is not in any way unique to Man. Our contention is that cognitive complexity, as we are construing it, is unique to Man. There might be other "higher animals" that can bring a variety of different considerations to bear upon the problems that come their way. But this has yet to be proved. Certainly, there is no evidence that they have anything like Man's ability to do this.

Secondly, let us note that our remarks about struggling with unfamiliarity go a long way towards resolving the kinds of dilemmas that were raised in connection with the housewife in the supermarket, the rally driver, and the monkeys swinging through the trees. What characteristics all of these situations is that this sense of struggling with unfamiliarity is essentially lacking. The experienced housewife, the experienced rally driver, and the monkeys all know very well what they are doing. The environments in which they are functioning are all familiar to them. By calling attention to the fact that there is no "struggle with unfamiliarity" in these cases, we put our finger on why it is that we are reluctant to say that cognitive complexity is involved. Perhaps it need hardly be added that the conceptualisations of Bieri and Scott and Vannoy and others are too weak to enable this particular conclusion to be drawn.

Unpacking Further Implications

A distinguishing feature of all worthwhile definitions is that they should provoke interesting follow-up questions. This is over and above any other qualities they may have, such as their ability to withstand critical scrutiny, and their ability to capture the essence of their subject matter in a convincing way.

Our proposed single-sentence definition does seem to have this desirable extra feature. It is clear from the discussion already presented that our definition raises numerous questions concerning the origin and genesis and nature of cognitive complexity. Our discussion of biological limitations of Man's information-processing capabilities raises additional questions about the inevitability of cognitive complexity, if such limitations are to be transcended. And mention has already been made of assorted matters to do with the possibility of defining and investigating different kinds of cognitive complexity (effective, ineffective, interpersonal, technological, cultural, and so on). We have also noted, in passing, a whole range of problems to do with research methodology - problems concerning, for example, the hazards and seductiveness of embarking on correlational studies which are conceptually ill-founded.

Even so, we have by no means exhausted the number of issues that can usefully and provocatively be "unpacked" from our definition. To exemplify this point,

(1) Cognitive Complexity, as we have defined it, would seem to have interesting implications for Creativity Research. This is so because the person who is "struggling with the unfamiliar", by bringing a variety of different considerations to bear upon his problems, is a person who is engaged in an essentially creative activity. He is not necessarily being creative in the grand paradigm-shifting manner of Newton or Einstein. And he is not necessarily being creative in the petty manner of the market researcher who invents a new shape of potato crisp. Typically, he will be operating

somewhere between these two extremes. But the fact remains that, whatever his problem (big or small) he is trying to create a solution for it. This is certainly the case with the socio-economic planner, the business entrepreneur, the grandmaster of chess, and so on. There is a presenting problem whose solution temporarily eludes them. And they are trying to create an appropriate solution by the device of bringing a variety of different considerations to bear upon it. What is going on here is a sort of aspiring situation-specific "constructivist" creativity.

(2) If we pause to consider how such a process can occur, we find that analogical reasoning is bound to play an important role. If we are faced with a problem which we have not had occasion to solve before, we invariably find ourselves mentally searching for problems which (a) seem to bear some relevant resemblance to the problem facing us, and which (b) we have successfully solved before. In this respect, we are looking for what psychologists sometimes describe as "telling analogies". We might notice, for example, that a given problem (call it A) has some features in common with another problem (call it B), and some extra features in common with yet another problem (call it C). If we already know how to solve B-type problems and C-type problems, we will therefore try to "construct" a solution to our A-problem by combining some of the procedures used in solving B-type problems with some of the procedures used in solving C-type problems. This may require a careful application of analogical reasoning, in which seemingly-relevant analogies get systematically explored with a view to confirming that they are indeed relevant to the putting together of a successful overall solution.

(3) Analogical reasoning is an interesting area of study in its own right. It is also a much neglected area - neglected, in fact, by both psychologists and logicians. (In general, textbooks on Logic give far more attention to deductive logic and inductive logic, than they give to analogical logic. Worse, analogical logic all too often gets treated under some such heading as "Fallacies of Reasoning" - where the reader is duly warned

against using analogies as a way of solving problems.) However, there is more to cognitively complex reasoning than the exploration and exploitation of analogies. If we want to cut a successful path through difficult problems, we may well require the kind of critical intellect which is (a) able to challenge the conventional wisdom, and (b) able to recognise general and/or recurring themes and patterns, and (c) able to identify and discount non-essential details, and (d) able, above all else, to "see the wood for the trees".

Here, then, is yet another cluster of issues which spill out of a systematic consideration of our original definition. And, as before, much more could be said about them. Of special importance, perhaps, is (d) above. With the advent of the new Information Technology, more and more people are getting saturated with more and more information. This greatly complexifies whole areas of human activity. As computer print-out data sheets pile up in our in-trays, what are we supposed to make of it all? What is being increasingly demanded of people, in all walks of life, is this ability to disregard irrelevant details and, in effect, to "see the wood for the trees". Without this ability, even the most effective problem solvers will find themselves defeated. However cognitively complex and painstaking they try to be, the complexity of the problem itself will be too great for them.

(4) With this last remark, we come to another intriguing set of problems to do with the relationship between cognitive complexity and problem complexity. Common sense suggests that problems do have some kind of intrinsic and objective complexity. A children's jigsaw puzzle is "obviously" less complicated than a 500-piece jigsaw for adults. And a TV set is "obviously" more complicated than a cheap transistor radio. On the other hand, common sense also suggests that qualities like complexity and simplicity are not properties of the problems themselves, but are properties of their evaluation within some other cognitive frame-work. So what is the truth of the matter? What sorts of relationships might we discern between the complexity of the problem itself, and the

complexity of the cognitive processes that might be (or need to be?) brought to bear upon it? We shall not attempt to answer this question. We merely throw it out as a way of winding up this section. Hopefully, we have said enough to justify our claim that our single-sentence definition does generate a rich variety of follow-up questions.

Research Implications

Yet another hallmark of a good scientific definition is its ability to suggest promising-looking research projects, along with an appropriate methodology for pursuing such projects. Our proposed definition seems to possess this quality as well, as the previous section has just tried to show. Among other things, our definition gives rise to questions to do with the origin and genesis and nature of cognitive complexity, its inevitability (in the experience of Man) as a way of trying to cope with biological limitation on our information-processing capabilities, and its problematic relationship with "problem" complexity. We have several times mentioned the possibility of there being several different (and usefully distinguishable) kinds of cognitive complexity. We have touched upon the need to understand more about the cognitive processes involved in wrestling with problems that call for cognitive complexity - processes such as analogical reasoning, critical thinking, and the ability to see the wood for the trees. No doubt there are other processes (of deduction, induction, and abduction) as well.

These are all eminently researchable problems and, overall, they would seem to point to the possibility of a research programme which is vastly more comprehensive and innerly-coherent - vastly more systematised and well-integrated - than any of the programmes suggested by previous workers. To notice the difference, the interested reader might like to refer back to our original review of Frank Barron's paper - where his proposed research programme goes off in a totally different direction, with the attempt to relate cognitive complexity to such qualities as sentience, sensuality, oral fixation in infancy, and so on.

Perhaps we should also notice that we have still only scratched the surface of the overall research challenge. If we focus (by way of example) on just one of our earlier research suggestions - e.g. the one that calls attention to the need to arrive at a greater understanding of the cognitive processes involved in trying to cope with difficult problems - we find that a whole ancillary list of intriguing research problems can be further "unpacked" from this suggestion alone. We might try to enquire, for instance, into the nature of the "complexification process" - i.e. the process (or processes) by which Man regularly complexifies his affairs.

Dialectical argument is one obvious "mechanism" of complexification. As thesis gives rise to anti-thesis, and then to synthesis, and then to anti-thesis again, the intellectual affairs of Man tend to become increasingly complicated. Dialectical argumentation tends in practice to lead to the stockpiling of more and more arguments and counter-arguments. Like the sort of pro-ing and con-ing that goes on in any public debate, it tends to produce the kind of complexification that adds to our confusion. What, then, are the processes of complexification that lead in the direction of clarity? Are there any such processes at all? In the Middle Ages, the so-called medieval disputation was devised to try to "contain" or bring systematic order into controversies that were otherwise likely to get out of hand. Formal disputation was a method for conducting controversial discussions, with one contender defending a thesis in the face of objections and counterarguments made by an adversary. The whole process was conducted according to clearly-agreed rules which, among other things, tried to ensure that the argumentation was kept clean and honest. Where is the analogue of such argumentation today? All too often, the public debating of major social issues is contaminated by special pleading, power play, vested interests, and selective pro-ing and con-ing of a downright dishonest kind. Such debates too often degenerate to a condition of minimum resolvability. The cognitively complex reasoning that is involved is of a kind that can only lead in the direction of confusion, rather than clarity.

Any enquiry into the processes or mechanisms of complexification would obviously need to take dialectical argumentation, formal methods of disputation, and common-or-garden "pro-ing and con-ing", into account. No doubt additional studies would have to be made into the way in which knowledge builds up and gets modified, etc. Again, these are all highly researchable problems. And again, there is a wealth of relevant literature. This ranges from books on the early dialectic of Plato and Aristotle, through many centuries to the rehabilitation of "the dialectic" by Hegel and Marx. There is parallel tradition of studies in dialectic stemming from the East, especially from India.

Interesting and important as these enquiries are, they are perhaps not the most important. For the first time in many pages, we might perhaps close ranks with researchers like Barron and Vannoy and ask whether or not cognitive complexity is "situation specific". If a person is cognitively complex with respect to one area of endeavour, is he likely to be cognitively complex with respect to other areas of endeavour? If we grit our teeth and agree, just for the moment, to construe cognitive complexity as a trait, is it likely to be a situation-specific trait, or is it more likely to be a general trait?

Now it is clear that researchers like Barron and Vannoy regarded these kinds of questions as being almost entirely empirical in content. What they envisaged was a series of research projects which would try to discover whether people who exhibited cognitive complexity in one area of endeavour were also likely (or more likely) to exhibit cognitive complexity in other areas of endeavour. If this were discovered to be the case, cognitive complexity would then be described as "a general trait" which some people had in larger measure than others.

We agree with Barron and Vannoy and others that this is an interesting and worthwhile question, although we would not formulate it in the language of trait

psychology. Common everyday observation suggests that people who are simplistic in one area (e.g. politics) are likely to be simplistic in other areas (e.g. economics, history, religion, and so on). The possibility does arise, therefore, of some people being cognitively simple "right across the board" and other people being cognitively complex "right across the board". And this might be regarded as supporting Barron's conjecture that cognitive complexity is the sort of thing, like intelligence, which some people have more of than others.

Unlike Barron and Vannoy and others, however, we do not regard this as a predominantly empirical question. We believe it is a matter that can largely be resolved on common sense grounds alone.

(1) First of all, no great research programme is required to notice that some people are habitually more wary or furtive or defensive than others. If we ask such people a completely innocuous question such as "How are things going with you?", they are likely to respond with a suspicious counter-question like "Why do you want to know?" For people who are running scared, wariness is almost a way of life. Since they are repeatedly putting themselves into "self-frightening" modes of behaviour, their imagination will project all sorts of "dire consequences" that they need to protect themselves against. Under these circumstances, their mental processes are bound to complexify. This is partly a result of their own anxiety-ridden imaginations, and partly a result of the fact that such people become increasingly difficult to deal with. Even if we treat them like fragile eggs, they are still likely to worry about why (or whether) we are just humouring them. On the basis of entirely general considerations, we can confidently assert that there will be a correlation (a positive correlation) between (a) anxiety, and (b) the tendency to be cognitively complex in the confused sense. In other words, anxiety will be positively correlated with what we have described as ineffective cognitive complexity.

(2) Secondly, no great research programme is required to notice that many people are capable of great cognitive complexity in specialised areas that are of particular interest to them. Most academics will surely have met the so-called "one-subject man" - e.g. the person who is brilliant at mathematics, and very little else. Such a person will surely exhibit great cognitive complexity in the field of mathematics (or whatever). But he may be almost totally naive in other fields. Similar remarks hold true in respect of people's hobbies. The ability to display cognitive complexity in one's area of specialism does not in any way imply an ability to display cognitive complexity in other areas, let alone "right across the board".

(3) Thirdly, no great research programme is required to notice that many areas of knowledge overlap and are closely-related. A person who obtains a degree in sociology automatically acquires some knowledge of (and sophistication in) subjects such as history, economics, philosophy, psychology, politics, and so on. We can therefore predict with high confidence that people who exhibit cognitive complexity in one of these areas will also tend to exhibit, cognitive complexity in the other areas. This does not, however, imply the presence of some general trait. Rather, it is an inevitable consequence of the way in which different knowledge bases overlap and inter-relate.

(4) Fourthly, no great research programme is required to notice that some people are more intelligent, or more mentally agile, than others. Some people also take special pride in being raconteurs, or being "up to date" with all the latest news. Qualities of this kind, taken either singly or in combination, will again give the appearance of there being some kind of general trait called "cognitive complexity". As before, appearances will be deceptive. To see this, all we need to do is imagine the unfortunate predicament of a retarded adult - or, for that matter, the predicament of a normal adult who, by virtue of being an immigrant, does not speak good English. In both of these cases, the kinds of tests advocated by Barron, Bieri, Scott, Vannoy, and others would tend to stigmatise these adults as showing "below average cognitive complexity".

For reasons such as these, what seems to Barron and Vannoy and others to call for an extensive research programme of correlational studies, seems to us to be a matter that can be largely resolved on common sense considerations alone - provided we first get our key concepts right. In the general area of cognitive complexity, there are indeed matters which call for systematic experimental enquiry. But they are not of the kind that Barron and Vannoy and others seem to envisage. So far as we can see, cognitive complexity is more in the nature of an option than a general trait. Normal humans can opt to take an interest in a particular subject, and can duly come to exhibit cognitive complexity (hopefully of the effective kind) within it. But there is no reason to suppose that they will necessarily come to exhibit more cognitive complexity in totally unrelated subjects. It would indeed be interesting news if this were discovered to be the case - i.e. if it were discovered that the development of cognitive complexity in one area (e.g. art or ballet) seems to "potentiate" the development of cognitive complexity in very different areas (e.g. mathematics or engineering). This would be worth knowing. But the possibility of investigating it arises out of our conceptualisation, not Barron's or Vannoy's.

Final Considerations

What then, is Cognitive Complexity?

Throughout the whole of this lengthy chapter, we have been in terrier-like pursuit of an answer to this question. In the course of our deliberations, we have often been highly critical of previous work in this field. However, it is one thing to say that other people's conceptualisations are "all wrong". It is quite another thing to say what a correct conceptualisation would look like. Constructive criticism is always very much harder than destructive criticism. And it is the constructive task that we have been setting our sights on.

As we have occasionally pointed out, our pursuit of the question (What is Cognitive Complexity) has itself turned into an exercise in cognitive complexity. Moreover, our attempt to arrive at a satisfactory answer has called for precisely the kind of cognitive complexity that our definition speaks of. Specifically, we have construed the question as one that requires a variety of different considerations (not, we repeat, dimensions!) to be taken into account. What is more, these considerations have had to be gone into, in some depth and detail, in order to arrive at conclusions which (unlike the conclusions of Vannoy, Bieri, Scott, and others) look as if they might actually stand up to rigorous examination. In other words, our search has involved the distinctively-human process of linguistic reasoning. And the reasoning itself has called for what we described as breadth of context and depth of nesting.

A sustained effort has been made to weave our way in and out of a whole network of pertinent-looking considerations, and to do this without ever getting seriously lost and without ever losing sight of our original goal. A wide range of material has been brought into account and "gone into" (to appropriate depths) and a variety of tentative conclusions were arrived at and pieced together - all for the purpose of trying to capture, in a realistic and convincing and worthwhile way, "the essence" of this thing that we have called cognitive complexity. In passing, we also noted certain biological limitations in our information-processing capabilities - limitations which oblige us, whether we like it or not, to proceed in this break-down-then-piece-together fashion.

As we have gone to some trouble to show, our conclusions have turned out to be radically different from those that can be found in the somewhat-scattered "mainstream" literature. If we look at the conceptualisations of researchers like Barron and Bieri and Scott and others, we find that for them cognitive complexity is a rather pallid and unexceptional affair. According to Barron, people can be characterised as cognitively complex, solely on the grounds that they notice (or show preference for) the

"less obvious" features of paintings, odours, etc. According to Bieri, a person can be characterised as cognitively complex, solely on the grounds that he/she has more "dimensions of judgement" available for the assessment of other people. According to Scott, a person can be characterised as cognitively complex solely on the basis of his/her ability to group the nations of the world into a variety of different groups. According to Lichtenberg and Heck, a person can be characterised as cognitively complex solely on the basis of his/her ability to notice more things about a given situation and also (perhaps!) to relate these things to one another in more intricate ways.

In general, commentators like Vannoy, Castiglione, and others tend to go along with these notions. But the conceptualisations are manifestly weak, and are by no means in clear accord with one another. The overall picture is further obscured by ill-considered assertions about the epistemological status of cognitive complexity (e.g. as a trait, or as a so-called multi-faceted construct), and by statements which, if taken literally, have the effect of equating cognitive complexity with multi-dimensional information processing. Under these conditions, there arises an "anything goes" situation in which it becomes entirely reasonable to attribute cognitive complexity to housewives in supermarkets, to rally drivers, and to monkeys swinging through the trees. For good measure, I remark that if a person can be categorised as cognitively complex for noticing and responding to the less obvious features of a work of art, John McEnroe must surely be credited with cognitive complexity for the sharpness with which he notices and responds to tennis shots that would completely defeat lesser mortals. Even the most experienced tennis commentators do not know how he manages to notice or "sense" the things that he does sense.

The kinds of conceptualisations and conclusions mentioned in the last two paragraphs cannot possibly be correct. There must be more to cognitive complexity than (cf. Barron) the tendency to notice and/or prefer the "less conspicuous" features of a single stimulus complex. There must be more to cognitive complexity than (cf. Bieri)

the ability to construe social behaviour in a multidimensional way. There must be more to cognitive complexity than (cf. Scott) the ability to classify static entities, such as the nations of the world, into a variety of different groups. There must be more to cognitive complexity than the ability (cf. Vannoy) "to view the person-objects in one's social environment in a complex or differentiated fashion". At best, these could only be weak and partial and tangential indices of cognitive complexity. There is no way in which any of these conceptualisations (which are, in any event, not wholly consistent with one another) can convincingly claim to capture the essence of what cognitive complexity is. And there is no way in which we can repose confidence in the kind of multidimensional information-processing characterisation (i.e. the ability to process a lot of information at once) that entitles us to attribute cognitive complexity to monkeys swinging through the trees. Above all, there is no way in which the essence of cognitive complexity can be plausibly captured by jargon-ridden definitions of the kind offered by Castiglione, when he associated cognitive complexity with "the ability to perceive and integrate multiple dimensions of many bits of information into an expandable cognitive organisation". It must be possible to do better than this.

The claim we are making here is that it is possible to do better. And the way to do it is to look at convincing real-life exemplifications of cognitive complexity – of the kind exhibited, for example, by socio-economic planners, international lawyers, Common Market negotiators, grandmasters of chess, and so on - with a view to identifying what it is that they all have in common. If we follow this entirely commonsensical procedure, we discover that every example we encounter seems to involve the use of the distinctively human characteristic of investigative reason. In every case, we see such things as the search for relevant-looking considerations (e.g. facts, data, theories, dogmas, opinions), an exploration and assessment of the considerations that have been identified, and an attempt to piece together what will hopefully be a successful solution.

There are of course several different ways in which this investigation process might be described. Some people might speak of marshalling relevant evidence, and of drawing various threads of an argument together. We have tried to span these alternative wordings by speaking of "struggling with the unfamiliar". The choice of words does not really matter very much. What does matter is the fact that all of these real-life examples of "cognitive complexity in action" seem to have the following in common:

1. They all involve the use of distinctively human ability to reason, and
2. They all involve the bringing to bear of a variety of different (and no doubt relevant-looking) considerations, which then need to be analysed and assessed in appropriate detail, and
3. They all involve a final "constructivist" phase in which assorted conclusions are compared and/or pieced together in order to generate some kind of overall conclusion or verdict.

It is our contention that this more detailed characterisation can be "unpacked" from our original single-sentence definition. Inevitably, there are limits to what any single sentence definition can be expected to say. What is always required, therefore, is a definition together with its systematic elaboration. In this chapter, we have sought to elaborate our definition, and our accompanying criticisms of other people's work - and to do this in a way which leaves very little doubt as to what we think, and why. This accordingly completes our attempt to re-conceptualise cognitive complexity, and to re-orientate research in the area along more profitable lines. It is therefore appropriate, now, to turn to the empirical part of our work.

PART TWO

Cognitive Complexity

as a

METHODOLOGICAL

AND

EXPERIMENTAL

Challenge

CHAPTER 5

SOME "NATURAL SETTING" EXPERIMENTS

Introductory remarks

Part One of this thesis was essentially conceptual in content. It surveyed the fruits of over 30 years of work, by assorted researchers, on the topic of Cognitive Complexity. It subjected this work to an extended and uncompromising critique. And it tried to demonstrate, especially in chapter 4, both the possibility and the desirability of reconceptualising (and hence reorientating) the entire field of research.

In Part Two, I shall now describe and comment on some of the experimental studies that I conducted over the period in which I was struggling with the conceptual issues. I shall not, however, be describing my experimental studies in fine detail, because the fine detail was never intended to be of primary importance.

This last sentence should not be construed as an excuse on my part for "skimping" on the descriptions and comments that follow. Nor should it be interpreted as an excuse for not having attempted (in most cases) to apply recondite statistical methods to my findings. The point to be noticed is that my experimental work was never intended to be of the conventional hypothesis-testing kind. The over-riding goal was not to test hypotheses and/or reach statistical conclusions. Rather, the aim was to try to run experiments that might help me to get clearer, in my own mind (a) about the nature and possible significance of Cognitive Complexity, and (b) about the sorts of difficulties that might arise in trying to experiment on the kind of cognitive complexity that I had in mind.

As indicated in chapter 1, cognitive complexity is a topic that I first began to take an interest in over 12 years ago. But several years were to pass, before I had the opportunity to make a concerted attack on the problem. By this time, I already felt that there was something deeply amiss with the existing literature on the subject. But it was not at all easy for a comparatively inexperienced postgraduate to reach the conclusion that so many well-accredited researchers had been so wrong for so long. Indeed, it is difficult for most Ph.D students even to contemplate such a possibility.

The truth of the matter, therefore, is that my initial experimental work was conducted before I had fully weaned myself away from the mainstream thinking of people like Vannoy. Accordingly, much of it still bears traces of this mainstream thinking (e.g. in its reliance, in some of my earlier experiments, on "objective testing procedures"). At the same time, I think that this early work of mine did show signs of trying to make a significant break with tradition.

Underlying the work that I shall be describing are several "tradition questioning" assumptions, and it may help the reader to understand my approach if I briefly mention three of them.

(1) First of all, it was always clear to me that the phenomenon of cognitive complexity (as I conceived it) posed a variety of conceptual challenges. Although I initially had no idea how radical my re-conceptualisation of the field would turn out to be, I was at least aware that some re-conceptualisation needed to be done. Among other things, I was already fairly clear that cognitive complexity must have something to do with the process of "investigative reasoning". And I was also fairly sure that this viewpoint was not adequately allowed for in the conceptualisations of workers like Barron, Bieri, Scott, and others. I was therefore in no doubt that some break with traditional thinking would be necessary.

(2) Because of this, I was equally clear that my experiments could not be all (or even "mostly") of the conventional hypothesis-testing kind. If the primary task was to get clearer about the nature of cognitive complexity, at least some of my experiments had to be geared towards conceptual clarification, rather than hypothesis-testing. In pursuit of this goal, my earliest experimental ventures all had an essentially exploratory "Let's see what this might tell us about Cognitive Complexity" flavour. The idea was simply to contrive experimental situations that might provide useful insights into what cognitive complexity is, and how it might best be researched. My early experiments were in fact little more than hopeful shots in the dark. I did an experiment. I got some information that I was not quite expecting. I tried to mull over the significance of the information. And so on. Such experiments could be written up in the conventional hypothesis-testing idiom. But it would be misleading to do so. The real objective was not to test hypotheses, but to accumulate personal experiences that might assist the task of re-conceptualisation.

(3) Finally, I became increasingly aware of the need to devise experimental situations of a relatively free and uncontrolled and naturalistic kind. If we are wanting to detect cognitive complexity in other people, it is not good enough to subject them to a series of brisk tests - e.g. of the Barron or Vannoy kind. What we must do is to try to create situations that are much more relaxed and open-ended. We must give the subjects time to have "a good unhurried think" (if that is what they want to do) about whatever facet of the situation happens to catch their interest. It is simply not good enough to set up test conditions which do little more than require subjects (as in the Barron experiment) to choose between one work of art and another. Tasks of this nature might precipitate a little cognitive complexity in some subjects (e.g. in subjects who are professional artists). But they can hardly induce cognitive complexity of the systematic "investigative reasoning" kind. And if the subjects are not even required to justify the choices that they make, the act of choosing might well involve no cognitively complex

thinking at all.

Cognitive Complexity in a Natural Setting

To illustrate the difference between experiments aimed at hypothesis-testing, and experiments aimed at conceptual clarification, it might be helpful to report on just one "naturalistic" situation that I contrived to set up about 4 - 5 years ago.

Six people, including myself, were informally seated in armchairs, around a low coffee table in a corner of the Open University's coffee lounge. Conversation was only intermittent, and drifted from one topic to another in the way that casual conversations tend to do. Three of the group I knew quite well. The other two I knew only by sight.

At some point in the conversation, someone made a sarcastic remark about a colleague who had failed to meet an important writing deadline. Another member of the group, known to everyone as Fred, was then provoked into mentioning a book that he had recently been reading. It was a Management Science Book, and it had some such title as "How to Manage the Poor Performer". I had not previously heard of this book. But, sensing that there might be an opportunity to induce and witness some cognitive complexity, I expressed interest in it, and asked Fred if he could outline its content.

According to Fred, the starting point of the book was the common observation that all organizations have employees who from time to time perform poorly or unproductively. The aim of this book was to describe several kinds of incentive schemes - a judicious mixture of sticks and carrots and "role allocations" - that can be deployed to get the poor performer working well (and enthusiastically) again. Fred then went on to summarise some of these, his whole exposition taking only about 2 - 3 minutes altogether.

By the time Fred had finished, interest in the topic was warming up. Discussion of the book was largely centred upon the kinds of incentive schemes that the book advocated. And some amusement was caused by various discussants speculating on how effective these management techniques were likely to be with certain poor performers that they happened to know. The person whose colleague had "let him down", by failing to meet a particular deadline, could not resist the temptation to express his doubts about the book. "What some people need," he said, "Is not incentives but punishment!" With mounting feeling, he continued, "There are some people who just never deliver any goods around here unless you positively threaten or harass them. Getting work out of them is about as easy as pulling teeth. They are past masters at generating plausible-looking reasons and excuses. And they get away with it again and again because other people, out of desperation to see the job finished, step in and finish it off themselves."

At this point, someone who had previously kept quiet broke in with a radically different perspective. "Perhaps," he said, "A poor performer is a poor performer because he has been subjected, in the past, to too much management. People who have a long history of being over-managed - a long history, perhaps going back to early childhood, of being at the receiving end of other people's attempts to manage them - perhaps such people get into a state in which they find it hard to do anything at all under their own initiative. 'More Management' might sound good as a slogan. But it might be the very last thing that the poor performer really needs."

This contribution was obviously disconcerting to the gathering as a whole. Prior to its being made, almost everyone had tacitly unified around the view that poor performers needed a special kind of managing. And quite a lot of sniggering had gone on about the possible consequences of applying special management techniques to the various poor performers or "rotten apples" that the discussants claimed to have had trouble with in their own departments. Suddenly, however, the whole tone of the debate

had changed. Here was someone who was both questioning the group's assumptions, and also making them feel a little guilty for suggesting that poor performers needed tougher techniques of management, rather than (say) insightful and sympathetic understanding.

One or two discussants half-heartedly tried to take issue with the discordant contributor. For example, one person insisted that someone he knew was a poor performer solely because he was "just plain lazy". But the dissenter quietly persisted. "If someone regularly fails to deliver the goods that he has promised, it does not seem to me to help very much to say that this is because he is lazy. First of all, I don't see how an outsider can be so sure that a person is lazy - as opposed to dozens of other things that he might be, such as disorganised or incompetent or demoralised or ill or overloaded with domestic problems or whatever. Words like 'lazy' have almost no explanatory content at all. They simply put people into crude categories that are stigmatising and probably wrong. What we really need to do is to look a lot deeper and ask why a particular person seems to be lazy, if that's what we think he is. Personally, I find it hard to believe that the man you are talking about is lazy by choice when, on your own admission, there are so many people waiting to jump on him, or ostracise or vilify him, whenever he fails to deliver. There must be more to it than that."

In the course of a few more exchanges like this, the dissenter managed to call attention to a much wider range of relevant issues. Among other things, he remarked that the book that Fred had described sounded as if it was mainly about "compliance", and techniques for ensuring compliance. He then remarked upon the almost total failure (as he saw it) of manipulative compliance-orientated techniques in areas such as crime, delinquency, drug-taking, and alcoholism. He also began to sketch out a whole world view about the origins and consequences and inevitable long-term breakdown of group coercion. He never finished, because the gathering was basically not interested in hearing him out. One person left the group, taking his unfinished coffee with him. And

the subject changed to something lighter and rather less threatening.

This overall incident made quite a deep impression on me at the time. What was interesting to me was the quality of thinking of the dissenting contributor. In just a few minutes of quiet talking, he had made everyone else seem "simple-minded" and insufficiently critical in their approach to what is widely regarded as being a very real and difficult human problem. The reasoning of the majority group had initially seemed to be both clear and uncontroversial. In order to function effectively, an organization has to have goals to which everyone contributes in a generally competent and reliable way. What this solitary dissenter was saying that, in the very act of formulating organizational (or departmental, or team) goals, one is automatically constructing a basis for subsequent group coercion - a basis for criticising or harassing or even persecuting anyone who does not feel comfortable about the contribution that he is being called upon to make.

Looked at in this way, there is nothing surprising or remarkable about the phenomenon of "the poor performer". It is in the very nature of organizational goal structures that some employees will fit more easily into such structures than others. Those who do not fit comfortably into a given goal structure will obviously try to renegotiate their position, or suffer in silence, or risk being demoted or called lazy, etc. Alternatively, they will have to produce reasons/excuses for not being able to do their job as well, or as enthusiastically, as other people expect. To see the problem of the poor performer in this way is to see the problem as one that is (a) an almost inevitable consequence of setting up organizational goal structures, and (b) best handled by sympathetic insight and understanding and "talking through", rather than by the routine application of incentive schemes and sanctions and other motivational devices.

So far as I could gather, the viewpoint expressed in the last sentence did not feature anywhere in the Management Science book that Fred originally described. And it certainly did not feature in the thinking of most of the 6-person group. Since the person

who offered this dissenting viewpoint was one of the two persons whom I had previously known only by sight, I quickly made a point of getting to know him better. His name was Mark. And in the weeks that followed, I had many interesting and quite lengthy one-to-one discussions with him. These all confirmed my initial impression of him as a man who regularly exhibited cognitive complexity of a highly interesting and incisive kind. Among other things, Mark was even able to provide me with a variety of insights into the possible nature of his own kind of cognitive complexity (usually, the unconfused and effective kind). These insights, which I shall summarise later in this chapter, greatly strengthened my conviction that the mainstream literature on cognitive complexity was seriously flawed. Here, after all, was cognitive complexity of a kind (and order) that experimenters such as Barron and Bieri and Scott and Vannoy never even began to tap.

The Unobtrusive Observation of Cognitive Complexity

In the psychological sciences as a whole, there are numerous circumstances under which it can be desirable to study some phenomenon of interest in its "naturally occurring" state. Consider, for example, the psychologist who is interested in the phenomenon of curiosity (or inquisitiveness) in young children. One way of pursuing this interest would be to equip a room with a whole variety of opportunities and temptations (toys to play with, cupboards and drawers and boxes to open, things to climb on or look behind...), and then sit quietly behind a one-way vision screen to see what happens when selected children wander into the room.

What is happening here is that the psychologist has potentiated a situation in which naturally-occurring inquisitiveness can be carefully observed, and observed without the children even realising that an experiment is going on. This form of naturalistic "unobtrusive observation" now has a recognised place in the methodology of psychological science. It is widely and deservedly acknowledged as a valid experimental

technique, despite the fact that the Experimenter inevitably has very little control over the behaviour that he is observing.

If we are wanting to study COGNITIVE COMPLEXITY in a naturalistic and unobtrusive manner, there is one very straightforward and rewarding way of doing so. It consists in:

- (a) Joining small groups of the informal "coffee table" kind, and
- (b) Trying, at an opportune moment, to potentiate a display of cognitive complexity (e.g. by asking an appropriate question), and
- (c) Trying to keep the display of cognitive complexity going (e.g. by showing sustained interest in what is being said, or by asking further questions), if it suddenly looks as if it might come to an abrupt end, and
- (d) Making assorted after-the-event checks, to try to get a better idea of what underlay/informed the cognitive complexity that one had been able to observe in the first place, and
- (e) Doing all of the above in an entirely natural and unforced manner, so that none of the group ever suspects that he/she is helping to provide data for an experiment.

Provided one resists the temptation to be impatient, conditions (a) - (e) above turn out to be fairly easy to apply. In the course of half an hour of discussion among intelligent adults, there is almost always one opportunity to nudge one or more members into a state of cognitive complexity - a state of trying to bring a variety of different

considerations to bear upon some topic of common interest. The secret is simply to join in the discussion, along with everyone else, and just wait for an opportunity to present itself. There must also be a willingness to "let the matter drop", if the group as a whole gives clear indications (e.g. by trying to change the subject) that that is what it wants to do.

Conditions (a) - (e) were in fact the conditions that I was self-consciously applying during the period in which the discussion on Poor Performers occurred. Over that period (a period of about 7 - 8 consecutive weeks), I made 30 attempts to apply this unobtrusive experimentation technique in assorted informal gatherings that I encountered. 20 of these attempts were successful in the sense that cognitively complex thinking and discussion were spontaneously sustained for at least 5 - 10 minutes. (In 3 of these cases, cognitive complexity actually occurred of its own accord, without my having to potentiate it.) However, 4 attempts out of the 30 were only moderately successful, because the cognitive complexity that I induced "fizzled" after only 2 - 3 minutes. The remaining 6 attempts were not successful at all.

The 30 attempts obviously qualify for description as unobtrusive experiments. The methods of potentiation and observation were fully in accord with standard practice. For ethical reasons, I did not use any secret tape-recorders to tape group discussions without the group being aware of it. It was therefore necessary for me to rely on my memory of what had been said, so that I could record salient discussion points etc. in a private notebook at a suitable later time. For my purposes, this after-the-event recording was entirely adequate. Basically, the object of the exercise was to see whether naturally occurring displays of cognitive complexity could provide useful new ideas or "leads" concerning the nature etc. of cognitive complexity. Whenever new ideas or leads did suggest themselves, they were obviously exciting to me. They had impact. And it is in the very nature of exciting ideas that they are not forgotten. No tape recorder was needed to record them. They were guaranteed to stay in my memory.

Let us finally note that there is a simple criterion for deciding when to discontinue experiments of this kind. There is obviously a limit to the number of new ideas/leads that such experiments can provide. And this is tantamount to saying that such experiments are subject to the law of diminishing returns. In my own case, I found that the first 6 successes (which included the discussion on poor performers) actually provided about 80% of all of these ideas/leads that I was later to find "valuable". After this 6th success, there was increasing repetition (i.e. of the same ideas and leads suggesting themselves again). And, by the time I had achieved my 15th success, the total had risen to around 95%. Since successes 16-20 added only 5% of new ideas (and seemingly-minor ideas, at that), I decided to terminate the series after the 20th success. As already indicated, the 20th success was actually my 30th unobtrusive experiment, because I had rejected 4 other attempts as being only moderately successful, and 6 others as being failures. In summary, then, the law of diminishing returns brought the series of unobtrusive experiments to a natural halt after the 30th trial. In effect, an adaptive sampling procedure was used - size of the sample (namely, 30 groups) being determined by the rate of decrease in the occurrence of new ideas.

The Protocol Data Base

Each of the 30 unobtrusive experiments generated a write-up or "protocol" - a semi-structured set of notes designed to record the kind of information listed in Table 1 on page 134. Several points need to be made about Table 1.

- (a) There is nothing sacrosanct about its content or overall layout. A variety of alternative formats would have served equally well. Basically, all that is required is a format which is both easy to use and comprehensive enough to help ensure that everything that matters is likely to get

recorded. In effect, Table 1 is mainly a "catch-all" listing of points that need to be recorded and thought about in the quest for conceptual clarifications as to (i) what cognitive complexity is, and (ii) what kinds of follow-up enquiries need to be made to clarify its nature (and origin and consequences, etc.) still further.

- (b) In the interests of comprehensiveness, there is some overlap among certain entries in Table 1 - e.g. entries (3), (4), (6), (7), and (8). For example, if all the members of a discussion group happened to be adult women, this fact might be recorded under entry (3) as a ladies meeting or hen party. Or it might be recorded under (4) as a re-union of former school friends. Or it might be recorded under (6) as a group of lady executives meeting to talk about the economic recession. And so on. Alternatives of this kind are of no importance. Since each protocol is rarely more than a few pages long, it does not matter much where the relevant information is located. It will be easy to find, wherever it is. And that is all that matters.
- (c) In experiments of the kind being described, the primary aim of each protocol is to function as a personalised memory jogger. The experimenter should be able to refer back to his protocols, at some later date, and find enough information there to reconstruct a reliable account of what happened, and what sort of sense he made of it all. (My account of the discussion on poor performers was in fact reconstructed from the relevant protocol.) The key entries in Table 1, therefore, are (10) and (13)-entry (10) recording what was actually said, and entry (13) recording the lessons learned. The remaining entries in Table 1 (to do with such matters as date, location, type of meeting, etc.) largely serve as background data for (10) and (13). In most cases, they take only a line or

two to complete.

- (d) Since the aim of these experiments was conceptual clarification, rather than specific hypothesis-testing, there was no pre-established "correct" way of filling in entries listed in Table 1. What got recorded was what seemed to me at the time to be relevant and interesting to my personal quest for conceptual clarity. Among other things, this meant that each new protocol that I wrote up tended to contain, under heading (13), only those "bright ideas" and "promising new leads" that had not occurred to me (and been written down) when I was compiling earlier protocols.
- (e) For the sake of completeness, a protocol was written up in respect of all 30 experiments, including the 4 that I regarded as being only partially successful, and the 6 that were failures. The information recorded in these latter 6 protocols was obviously sparse. But it is possible to learn useful lessons from failures of this kind - if, for example, an attempt to be cognitively complex is cut dead by some reaction or "ploy" that one has not noticed (or considered seriously enough) before.
- (f) Decisions as to what to include in any given protocol, and what to omit, must inevitably be matters of subjective judgement on the part of the experimenter (myself). If the goal is conceptual clarification, what gets written down are experiences and ideas that change the experimenter's mind about certain aspects of the conceptual issues being addressed. This is bound to be a personal decision. Moreover, there is inevitably a sequential effect as the experiments proceed. What gets written down in one protocol does not need to get written down in such detail in later protocols. There may also be cross-referencing among protocols if later experiments suggest modifications to views expressed in earlier

protocols. Entry (15) of Table 1 makes explicit provision for this possibility.

Table 1

General Format of Protocols

- (1) Date of Meeting
- (2) Location of Meeting
- (3) Type of Meeting
(coffee table, cocktail party, one-to-one, etc.)
- (4) Occasion/General Context
(informal gathering, people just taking a rest, etc.)
- (5) Topic(s) Discussed in part(s) of meeting
in which cognitive complexity was exhibited
- (6) Number and Type of Participants
(e.g. 5 academics, plus names if relevant)
- (7) Additional Information about Participants
(heterogeneity, how well-known to one another,
level of expertise in subject matter under
discussion, comings-and-goings within group, etc.)
- (8) Manner of Arising of discussion(s) in which cognitive
complexity occurred
- (9) Additional Comment on any of above
(nature of potentiating remarks, general
atmosphere, seriousness or otherwise, etc.)
- (10) Account of What Happened
(who said what to whom, etc.)
- (11) Approximate Duration of (10) above
- (12) Additional Information, where relevant (reactions and
levels of interest of various participants, way in
which discussion extended or brought to an end, etc.)
- (13) "Lessons Learned" (implications for furthering the study of
cognitive complexity, possible new leads and
insights, new questions raised, conceptual and
definitional implications, methodological
implications, etc.)
- (14) Follow-Up Checks that might be worth making
- (15) Concluding Remarks
(including unfinished business, and
cross-referencing to other relevant protocols, etc)
tended to contain, under heading (13), only those
"bright ideas" and "promising new leads" that had
not occurred to me (and been written down) when I
was compiling earlier protocols.

- (g) As already stated, the 30 protocols were obtained over a period of 7-8 consecutive weeks. They constituted the systematic build up of an initially impressionistic body of ideas on the subject of cognitive complexity. The build up was systematic in the sense that each new experiment tended to modify (e.g. amend or refine or elaborate) impressions obtained from prior experiments. And each new protocol was influenced or "glossed" by what had been written down in previous protocols. By the time the 20th experiment had been completed, and its protocol written up, my accumulated impressions were beginning to crystallise into tentative conclusions. And by the time of completion of the 30th experiment, the tentative conclusions had hardened still further into conclusions that were beginning to feel quite definitive. In the next section, under the heading of "Findings", I will attempt to say what the main impressions and conclusions were.

Findings

As a result of observing, and reflecting at length upon, the 30 groups that I have spoken about, I became increasingly convinced of the need to distinguish several substantively different kinds of cognitive complexity. To see why I arrived at this conclusion, it will be helpful to recapitulate the sequence of events involved in the discussion on "Poor Performers".

(1) First of all, consider the original author of the book that was discussed. For the author of the book, the thinking in which he was involved was obviously of a cognitively complex kind. What he had to do was bring a whole variety of different considerations to bear upon the problem of how to get poor performers working well and enthusiastically again. He may well have been mistaken in some of the considerations that he brought to bear and (hence) in some of the conclusions that he reached. But, as we have already seen, cognitively complex thinking is not necessarily correct thinking. The only requirement is that the thinker should, so to speak, be

mentally juggling with a variety of considerations that seem to him (perhaps rightly, but perhaps not) to be relevant.

(2) Let us now turn our attention to Fred, the person in the informal gathering who had read the book. If the book contained ideas that Fred had not previously thought about, and if he wanted to come to grips with them, he also would be plunged (during his reading) into a cognitively complex mode of reasoning. But the circumstances in which the reader Fred finds himself are not by any means the same as those of the original author. The author is generating a cluster of new ideas and considerations about how to cope with poor performers. And the reader is pursuing the parallel and complementary task of trying to assimilate these ideas. The reader is immersed in a cognitively complex mode of thinking, because he is trying to make sense of a variety of different considerations that have been generated by someone else. A shorter way of putting the point would be to say that there is the kind of cognitive complexity needed to GENERATE one's own complex arguments and conclusions. And there is a somewhat different kind of cognitive complexity needed to FOLLOW the complex arguments and conclusions of other people.

(3) However, even this last assertion is not quite complete. If Fred had been a critical reader, he would have done more than just "soak up" what the author had to say. In addition to assimilating the ideas advocated by the author, he would also have brought to bear his own views on the subject. In other words, the reader would have tried both (a) to follow the author's arguments, and (b) to ASSESS the author's arguments in the light of his own ideas and experiences. To attempt to do both (a) and (b) - i.e. to try both to follow and assess - is to involve oneself in yet more cognitive complexity.

(4) Let us next consider the episode, in the informal gathering, in which Fred was briefly summarising the content of the book for the benefit of the other people present. In a space of about 2 - 3 minutes, Fred presented a whole cluster of

considerations and conclusions that the author had laid out. At first sight, it might be thought that Fred was necessarily being cognitively complex during this 2-3 minute period. But this is not really the case. In order to summarise what an author has said, all that is required is a reasonably accurate memory for the relevant key points and details. No cognitive complexity is needed to speak from memory in this way. Cognitive complexity begins only at the point where someone - a critic such as Mark, for instance - elects to start thinking, with some seriousness, about the various considerations being outlined. So far as Fred himself was concerned, the fluency of his delivery showed that he personally was not even attempting to struggle with the ideas that he was throwing out. He was simply passing them on for other members of the group to pick up and play with, if that is what they wanted to do.

(5) This kind of summarising behaviour leaves the other members of the group with several options. One possibility is that they do not even try to pay very much attention to what is being said. Perhaps they are content just to get the general gist of the author's views. In such cases as this, very little cognitive complexity is required of the listener. For listeners who choose to respond in this way, Fred is simply offering to transfer a miscellany of talking points from his own head into theirs. All that is expected is a few light weight remarks ("That's very interesting", "I like it!", "I bet that wouldn't work on our poor performers", etc.), and the whole discussion can politely come to an end.

(6) But suppose that a listener happens to be seriously interested in what Fred has to say? In this case, he is committing himself to cognitive complexity of a quite demanding kind. If the ideas that Fred relates are new to him, he must at the very least (a) listen attentively, and (b) try to construct in his imagination a conceptual framework within which the utterances of Fred make sense. In addition, he may simultaneously find himself checking out the coherence of what Fred has to say, and also comparing it with his own ideas on the subject. In other words, he will be trying to exercise critical

judgement regarding the credibility and coherence and validity of the original author's ideas. As shown by the intervention of Mark, this really does call for cognitively complex thinking.

(7) Notice, also, that the kind of critical thinking that has just been described has to be done under considerable time pressure and, more often than not, in the face of assorted distractions and interruptions originating from other members of the gathering. This is very different from the position that Fred was in when he first read the book. In Fred's case, it was possible for him to read the book at his own pace and, where necessary, re-read pages that he did not fully grasp the first time around. In Fred's case, it was also possible for him, if he so desired, to study the book under distraction-free conditions - e.g. in the privacy of his own home. None of these luxuries is available to the person who is trying to listen, seriously and attentively, in an informal gathering. The information that Fred provides has to be digested at the rate (and in the manner/order) that Fred delivers it. And since Fred summarised the main content of the book in only 2 - 3 minutes, key points were coming very fast indeed. No back-tracking is possible under these conditions, and extraneous disturbances just have to be put up with. All this greatly increases the difficulty of listening in a serious and critical way to what is being said, and may help to explain why people in informal groups so often seem reluctant even to attempt it.

(8) Notice, also, that the possibility of opting out - i.e. of not even trying to make much sense of what is being said - is rendered very difficult if a particular member of the gathering is being addressed directly. In the discussion on poor performers, it was I who first expressed an interest in hearing about the book. So Fred was most of the time looking at me while he was summarising its content. Under these conditions, I felt under strong pressure to do my best to follow and evaluate what often seemed to me to be a rather complicated set of ideas and considerations. In other words, I felt that, out of politeness, I was being forced into the kind of cognitive complexity needed to "follow

and assess". The cognitive strain was considerable. Fred was not the most orderly expositor. Key points seemed to me to be arriving thick and fast, and in somewhat scrambled form. I was also aware that if I took time off to think about one controversial-sounding point, I was likely to miss the next half-dozen! By the time Fred had finished his summary, I was beginning to wonder what on earth I could say that would (a) sound reasonably intelligent, and (b) make Fred feel that he had not wasted his time in responding so fully to my display of interest. Fortunately, other members of the group came to the rescue with an assortment of talking points and reactions which obviously made Fred feel that his little presentation had been well appreciated.

(9) If we now transfer our attention to the kinds of reactions that Fred's summary elicited, I find (on consulting the protocol) that I informally classified these as being mostly of a judgemental or nitpicking or "waiting to pounce" kind. Roughly speaking, a reaction can be called judgemental if it consists mainly in expressing approval or disapproval of certain things that Fred had reported. Very little cognitive complexity is needed to do this (although expressions of disapproval, if challenged, can lead to justificatory arguments of a cognitively complex kind). A reaction can be called nitpicking if its purpose is mainly to take issue with some comparatively isolated or unimportant facet of the overall presentation. For example, there was one point at which Fred remarked that employees were less likely to perform well if the role structures within an organization were not clearly defined. One member of the gathering objected to this as being an unnecessary bit of mystery-mongering. "What you mean", he said, "Is that people are unlikely to perform well unless they know what is expected of them." Such interruptions, which I describe as nitpicking, are typical of small-group gatherings. They may well have some degree of merit, but they do not call for much cognitive complexity on the part of the person who makes them. Similar comments can be made in respect of the "waiting to pounce" reaction. This is typified by the man who burst in with the view that what some poor performers need is punishment. Such outbursts suggest that very little effort was made, by the person concerned, to follow Fred's

summary as a totality. It was more a case of his having already decided what poor performers really need (namely, some good old-fashioned punishment). Noting that Fred's summary had very little to say on this particular topic, he therefore broke in to tell the gathering his own views on the matter. Yet again, very little cognitive complexity is required to make that sort of contribution.

(10) The kinds of reactions just described are all essentially light-weight. They are in marked contrast to the reaction of Mark, the person who swung the whole discussion around by suggesting that "more management" might be the very last thing that the poor performer needs. It was clear that Mark had listened conscientiously and intelligently to Fred's account, and had moreover evaluated it quite carefully as he went along. However, he did not break into the discussion in a judgemental or nitpicking or "waiting to pounce" way. Whereas the advocate of punishment had jumped in with an obviously pre-established conclusion, Mark was taking the original topic in its entirety, and trying to bring to bear on it a variety of alternative considerations. Here, for the first time in the discussion, was a genuine exhibition of quiet investigative reasoning - a gentle and seemingly-impartial exploring of a viewpoint which was fundamentally at odds with the one that Fred had described. What is more, it was an entirely voluntary exercise in cognitively complex thinking. Whereas I personally had felt obliged to think in a cognitively complex manner (because Fred was primarily addressing his remarks at me), there was no such obligation placed upon Mark. He had voluntarily chosen to take the topic seriously, and was then thinking-on-his-feet about it for the benefit of anyone else who might be interested.

(11) Mark's contribution had several other distinctive features. In addition to being voluntary, it had a distinctively truth-seeking feel about it. As I later discovered, it was also "systemic". And it displayed considerable independence of thought. Mark was very much his own man. As I gradually got to know him better in the months that followed, I discovered that this was typical of the way in which he tackled all serious

topics. In most informal gatherings, truth-seeking is a rare phenomenon. In political arguments, for example, many people seem to think that, in most important respects, they are already in possession of the truth. So the goal of such arguments is typically to score points, or put the opposition right. Wanting to win or impress, or wanting to argue for the sake of it, or wanting to argue just to liven the proceedings up - these are all much more common than the goal of truth-seeking. Perhaps truth-seeking is rare because it demands a good intellect, a wide range of relevant concepts, a searching kind of honesty, and a thoroughly open-ended approach. People do not arrive at the truth if they spin arguments that are calculated (perhaps unconsciously) to lead to a particular conclusion, or to conform with a particular school of thought. Neither do they arrive at the truth by joining in the sort of ding-dong battle that arises out of an emotive clash of opinions. A truth-seeking enquiry is one that has to be essentially impartial and open-ended. There must be a willingness to follow a critical line of reasoning wherever it leads, even if it points towards conclusions which feel uncomfortable, or run counter to conventional wisdom. Perhaps it should be added that truth-seeking enquiries do not necessarily lead to Truth (with a capital T). It is rather the case that they are more likely to get closer to it than disputations of the wanting to win/impress kind.

(12) A special word needs to be said about Mark's systemic approach to difficult problems. For Mark, the word 'systemic' meant something more (and something deeper) than the related word 'systematic'. I will elaborate on this point later in the chapter. (Briefly, systematic thinking is suggestive of thinking that is orderly and tidy. Systemic thinking is additionally suggestive of thinking that flows from a deeper "System of Thought", and in accordance with guiding principles that facilitate the discovery of what is relevant and what is not.) For the moment, it is enough to notice that systemic thinking, of the kind that Mark regularly engaged in, stands in significant contrast to the type of haphazard and inconsequential thinking that tends to occur so frequently in most informal groups. To the serious-minded person, informal gatherings can be more than a little disappointing. More often than not, discussion takes the form

of assorted members tossing disparate ideas into the ring - ideas that might at various times be intelligent, unintelligent, relevant, irrelevant, half-baked, emotional, dispassionate, earnest, arbitrational, facetious, witty, carping, or whatever - and then "batting them around", or letting them go, according to whim. Most members seem to find this sort of back-chat emotionally satisfying. It enables people to let off steam, and engage in good-humoured exchanges, and so on. But it is not inaccurate to describe the content and drift of such talk as being generally haphazard and inconsequential, because it seldom leads (except by accident) to any significant discoveries or conclusions.

(13) The lack of any "serious" discussion in informal gatherings is seldom a matter of concern to the participants themselves. In some respects, this might seem a little surprising. Almost by definition, informal groups do not have any agenda to get through. So there is no shortage of time for a spell of serious discussion, if that is what the participants wanted. The fact is, however, that they generally do not want to engage in serious discussion. The nearest that they ever get to such discussion is the occasional "heated argument" that breaks out. And even that tends to get killed off if it starts looking too serious or ugly. For most people, an informal gathering is seen as an occasion for relaxing and (hence) for not having to think too hard or be too serious. There accordingly tends to be a steady emphasis on the desirability of maintaining good overall rapport and (hence) avoiding discussions that could make certain members feel uncomfortable or threatened. This is why the contributions of people like Mark tend to be neither expected, nor particularly welcome.

(14) There is however one kind of contribution that does tend to be welcomed, notwithstanding the fact that, at first glance, it does look like a sustained display of cognitive complexity. It occurs whenever someone chooses to entertain on "regale" the rest of the gathering with some highly intricate story or analysis or viewpoint. As already hinted in section 11 above, politicians can be quite good at this. If they are challenged on some sensitive social or political issue that they have already thought

about, they are often able to come up with a whole variety of impressive-looking considerations which they then bring to bear on the issue in order to demonstrate the validity of their own preferred viewpoint. It is important to understand that this kind of display is not (according to our way of looking at the matter) an exercise in cognitive complexity on the part of the speaker. It is more in the nature of a skilled (and usually pre-rehearsed) performance. In our definition of cognitive complexity, we were careful to associate the phenomenon with a mode of mental functioning that arises "when an attempt is made to solve unfamiliar problems by bringing a variety of different considerations to bear upon them". The politician who puts on a vigorous display of rhetoric or oratory is not, by our definition, attempting to solve an unfamiliar problem. Rather, he is proudly exhibiting his solution to a problem that is already familiar to him, and for which he has already worked out a form of solution that satisfies him. Like Fred, who provided a fluent summary of the book on poor performers, the politician is essentially speaking (albeit in a complicated manner) from memory. It is of course possible that the politician was forced into a cognitively complex mode of reasoning when he first attempted to arrive at his now-polished solution. But, even here, it is not unknown for politicians to "lift" their solutions, almost verbatim, from the pages of the political journals that they read. It remains true, however, that if an intricate solution to some problem exists, then someone must at some time have engaged in cognitively complex reasoning, in order to have arrived at it. Thereafter, the reporting of such a solution (e.g. in informal gatherings) may call for little more than a moderately accurate memory.

(15) We are here raising matters which have an important bearing on the methodology of enquiries aimed at studying cognitive complexity. What we are talking about is the difference between people being cognitively complex, and people only seeming to be cognitively complex. In one of the 30 groups that I observed, someone remarked on the trouble that he was having with some of the plants in his garden. One member of the group, who was a horticultural expert, then came out with a very

substantial number of considerations to do with the healthy growing and maintenance of such plants. He was not however even pretending to be cognitively complex in his presentation. He was speaking fluently, and from a well established knowledge base, about problems with which he was entirely familiar. Of course, any member of the group who wanted to grapple seriously with what he was saying would automatically be plunged into a cognitively complex mode of thinking. But this tends not to happen on occasions such as this. Having exhibited the relevant considerations, the gardening expert then made a number of specific suggestions which were easy to remember (or to jot down on a scrap of paper), and the discussion moved smoothly on to another topic. At no stage was there any feeling of cognitive complexity - either on the part of the gardening expert, or on the part of the listeners. The problem was an easy and familiar one for the expert to deal with, and it was easy for the listeners to take note of the recommendations that he finally made.

(16) If we pause to reflect on the incidents described in sections 14 and 15, we are in a position to notice what seems, at first sight, to be a disturbing anomaly. What emerges is the finding that people can talk in complicated ways, about complicated subjects, without ever being in more than a "light-weight" state of cognitive complexity! In the case of the gardening expert, we have an instance of a person who verbally brings a variety of different considerations to bear upon the problem of how to look after certain kinds of plants. But there is little cognitive complexity involved in his doing this, if the problem itself, along with the relevant considerations, are all entirely familiar to him. When the expert starts talking about the relevant considerations, the listeners are likewise able to avoid getting into a cognitively complex state, by the simple expedient of not even trying to bring the expert's considerations to bear upon the problem under discussion. Instead, they can simply note that such considerations exist, and then wait to see what the expert does with them. If they so desire, they will be content just to catch the general drift of what is being said, and they may privately be interested only in listening to the recommendations (for plant care) that he finally comes up with.

Similarly remarks apply in respect of the politician described in section 14. In this case, the considerations that are brought forth will again be largely from memory (probably from quite-recent memory, if the politician was challenged on the same issue only the day before). So there is not much cognitive complexity required there. Similarly, the listeners can avoid getting into a state of cognitive complexity by just not bothering to agonise, to any significant degree, about what is being said. The smooth presentation of an accomplished political speaker is something that many people listen to in the way that they listen to a skilled raconteur. It is regarded as a sort of entertainment that does not need to be taken seriously, especially if the speaker is basically only looking for nods of agreement or admiring glances. The only cognitive complexity required of such listeners is cognitive complexity of the type needed to follow (perhaps only minimally and intermittently) some line of reasoning that is not immediately comprehensible or ignorable.

(17) There are several other factors that enable people to talk in complicated ways about complicated subjects, without ever having to move at all deeply into a cognitively complex mode of thinking. The most important factor is almost certainly to do with the enormous amount of mass media coverage that is given over to the popularising of scientific and technological and other complex topics. As a result of watching TV, or listening to the radio, or reading books or journals or newspapers, every intelligent adult is nowadays in a position to collect a whole armoury of complicated-sounding talking points about such matters as environmental conservation, weight-reducing diets, or the disposal of nuclear waste. By reading journals such as Reader's Digest or the Scientific American, one can readily obtain what might be called "glimpses of understanding" concerning topics about which one would otherwise remain almost totally ignorant. One can also pick up bits of specialist terminology, and intriguing-sounding ideas, which can then be talked about in informal gatherings. But there is of course no possibility of applying these ideas to solve unfamiliar problems. All that is happening is that the complicated-sounding ideas are being exhibited and

"played around with". And this is wholly in keeping with the ethos of most informal gatherings, which is to keep the conversation relaxed and essentially non-serious.

(18) From the standpoint of this thesis, people who talk about complicated subjects in complicated ways are not necessarily being cognitively complex. They might be. But it is often difficult to be sure. And there are other possibilities which we have just noted. One such possibility, exemplified by the gardening expert, is that the person concerned is talking from a secure knowledge based about matters that are entirely familiar to him. Another possibility is that certain topics (like the disposal of nuclear waste) are sufficiently emotive to get people talking, notwithstanding the fact that they might know very little about the technical problems involved. In such cases, the seeming "complexity" of their discussion may consist in little more than their speaking from memory about odd snippets of information that they have gleaned on the subject. In effect, they are just telling one another what they happen to have seen or heard or read. This can sound quite complicated - especially if the various contributions are sprinkled with technical jargon and bear no obvious relation to one another. But, if the purpose of the exercise is simply to build up a shopping list of talking points, it can often proceed without any cognitive strain at all. Cognitive complexity begins only at the point where someone decides to take some of the talking points seriously, and bring them to bear upon the topic with a view to achieving some kind of significant clarification. And the gathering may feel no compulsion at all to encourage this.

(19) As indicated in section 15, the methodological challenge here is that of trying to distinguish between (a) people who are being genuinely cognitively complex, and (b) people who are not. With regard to (b), there would appear to be at least two sub-categories. First of all, we have identified people (like the politician, and the gardening expert) who are capable of putting on a genuinely effective display of complex reasoning, but who are not actually experiencing any cognitive strain or complexity at the time, because they are doing it all from memory. This is not meant to belittle their

achievement. It is simply to point out that what was once a cognitively complex problem for them has now been mastered and (hence) transmuted into the sort of well- practiced and fluent skill which causes them no further difficulties at all. Secondly, we have identified a somewhat different type of situation in which people seem to be reasoning in a complex way, but are actually doing something rather different - such as putting on a show, or "acting clever", or generally complicating the discussion by throwing in cryptic snippets of information that tend to confuse or "throw" the rest of the gathering. If we now ask ourselves how we might reliably distinguish between case (a) and case (b) - i.e. how we might distinguish between the real thing, and the simulation or pretence - there appears to be only one answer. We must somehow contrive an experimental situation in which we can get to know our subjects well enough to be able to make the distinction with reasonable confidence. Only then will we be able to distinguish genuine cognitive complexity from "pseudo" cognitive complexity.

(20) In order to see the force of the point that has just been made, it is necessary to appreciate that, in almost all social gatherings (not just the formal ones) people regularly tend to give the impression that they are more clever than they actually are. They pretend to be following arguments when they are not. They throw in other people's ideas as if they were their own. And so on. In extreme cases, it is possible to put on a completely spurious act of being cognitively complex. Suppose, for example, that the gardening expert (cf. section 15) had chosen to behave in this way. On hearing that the trouble that one of the group was having with his plants, he might have put on a puzzled expression and said something like, "Oh! I haven't had much experience of that particular problem." He might then have gone on to ask further questions - gradually bringing out more and more considerations which he could then draw together, in a triumphant manner, to arrive at an appropriate set of recommendations. An impressive-looking display of cognitively complex thinking - but all of it faked, because he actually knew the correct answer all the time! By pretending that a problem is unfamiliar, when it is not, people can quite easily give the impression that they are

struggling, in a cognitively complex way (and, of course, victoriously) with difficult-looking problems that they have "never seriously thought about before". As a result of observing my 30 groups, I became increasingly aware of the fact that this sort of dissembling can go on all the time, to a greater or lesser degree. The problem of identifying authentic cognitive complexity is therefore by no means a trivial one.

(21) In case some of my remarks about small groups sound disparaging or patronising, perhaps I should say here that they are not intended to be. If a handful of people are gathered around a coffee table for the purpose of relaxing, there is no great harm in the occasional bit of "showing off". There is nothing surprising, either, about the fact that discussants often pretend to be following arguments when they are not. If relaxation is the objective, it can also be positively inept (from a social point of view) to try to plunge the entire group into cognitively complex modes of reasoning. Apart from that, there is also (as we have seen) the sheer difficulty of trying to think about complex topics, in cognitively complex ways, in front of people who are not feeling particularly serious, and who may not want to be subjected to cognitive strain for more than a few minutes at a time. Informal gatherings which eschew cognitive complexity can hardly be criticised for doing so, if relaxation and enjoyment is what they are really looking for. Such groups may even be showing good judgement - e.g. by tacitly recognising that informal gatherings are not suitable occasions for sustained problem solving attempts of the kind that Mark invited his gatherings to engage in.

(22) There is however one comment of a slightly disparaging kind that does need to be made. It arises out of my observations that people who participate in relaxation-orientated gatherings often leave with the conviction that they have enjoyed "some really first-class conversation". By this, they almost invariably mean something like "high quality and incisive conversation". Now if this is what they believe, my personal feeling is that they are tending to delude themselves. What passes for high-quality conversation, in many formal gatherings, is what I would prefer to describe

as the light-weight exchange of second-hand ideas. In saying this, I am trying to be uncompromisingly descriptive, not cynical. I am not trying to sound elitist, either. To a large extent, we are all second-hand people. We gather ideas from various sources and authorities, and we throw them into our conversations without acknowledgement, as and when seems appropriate. This is all part of the accepted process of everyday conversation, and I am not wishing to pour scorn upon it. The only point that I insist on making is that informal conversations of this kind can seldom be described, at all convincingly, as being of high quality. As a social occasion, the informal gathering can no doubt fulfil a variety of worthwhile human functions. And this should not be disparaged. But the fact is that such gatherings rarely take time off to investigate complicated-looking topics in depth. If we are wanting to study authentic examples of cognitively complex reasoning - the kind of reasoning that tries to tackle difficult and unfamiliar problems in a serious-minded way, and without any attempts to dissemble, or "put on a show" - informal gatherings turn out to be not the best places to look.

(23) Over the past 22 sections, I have been describing what seems to me to be a quite useful collection of "findings". Since these findings pre-dated the final re-conceptualisation of cognitive complexity that was presented in chapter 4, it can be said with assurance that my study of the 30 groups both (a) informed the re-conceptualisation, and (b) pointed to ways in which the re-conceptualisation might be followed up or extended. In effect, the last 22 sections have mainly been addressing two related topics. The first of these is to do with the different TYPES of cognitive complexity that can be identified (ranging from "authentic" which is rare, to "pseudo" which is rather less rare). The second is to do with the different CIRCUMSTANCES under which cognitive complexity (of any type) can manifest itself. To some extent, the circumstances partially determine the types, and vice-versa. For example, there are circumstances, in small group gatherings, where some people are making remarks that almost compel certain listeners to try to "follow and assess" what is being said. And there are other circumstances where the manifestations of cognitive complexity is almost

a completely voluntary phenomenon. This calls attention to a further natural and important distinction - the distinction between (i) being cognitively complex as a result of trying to bring one's own considerations to bear upon some unfamiliar problem, and (ii) being cognitively complex as a result of trying to make sense of (and possibly do something with) the considerations that other people are bringing to bear upon the problem. Very often, some combination of (i) and (ii) will be required.

(24) With respect to the last point made, we can additionally note that the attempt to make sense of other people's considerations can itself vary in complexity. As already mentioned, some cognitive complexity is required simply to follow (with a modicum of understanding) what other people are saying. Additional cognitive complexity is required to assess what other people are saying. Yet more cognitive complexity is needed to check out the validity of one's own assessments. And so on. All of this calls for considerable mental effort. And our observations have highlighted the fact that the effort can be particularly arduous in informal group discussion, where there may be very little control over distractions and interruptions, and very little control over the rate and manner of delivery of the information coming in. So the question that arises is whether the effort is likely to be perceived as worthwhile. Our study of the 30 groups suggest that most people, most of the time, answer this question with a "NO", especially if they are wanting to relax. But it is not always easy to opt out, and there will always be occasional instances of people being genuinely interested in pursuing a difficult topic seriously. However, the general ethos of most informal gatherings is to take things easy. So the likelihood of being allowed to pursue a serious topic seriously turns out to be rather small.

(25) All of this has important implications for the systematic study of cognitive complexity. Taken as a whole, the findings that have just been summarised all point to the conclusion that informal gatherings tend to be light-weight affairs, because that is what most of the participants want. In practice, there are numerous opportunities for

issues/topics to be taken up in a serious way. But if anyone tries to do this, he typically (as in the case of Mark) gets a luke-warm hearing. This means that, for much of the time, discussion in informal gatherings is of a kind which calls for almost no cognitive complexity at all. If cognitive complexity is called for, this is usually because the discussion has suddenly become confused or heated. But, in these cases, what we are witnessing is cognitive complexity of a confusional kind - i.e. cognitive complexity that leads towards confusion, rather than clarity. In informal gatherings, the clarificatory kind of cognitive complexity (the kind that Mark tried to engage in) is, for the reasons already given, a rarity. It requires a truth-seeking (rather than a wanting-to-win) mentality. It requires open-ended impartiality (rather than the routine application of personal prejudice). It requires time and patience to tease out the considerations that matter. And so on. To the extent that these requirements all run counter to the general disposition of most informal gatherings, cognitive complexity of the clarificatory kind is a somewhat rare occurrence. Phenomena such as dissembling, and "putting on a show", tend to be much more common. And this can make it very difficult to distinguish authentic cognitive complexity from the "pseudo" or deceptive variety.

(26) Now it might be argued, with some conviction, that the only kind of cognitive complexity worth engaging in is the kind that veers towards clarity. Where, then, can this "clarificatory" kind of cognitive complexity be found? No doubt there are some families and friendship groups in which there has developed a tradition of sustained serious discussion - e.g. at the dinner table on a Sunday evening. But the 30 groups that I observed were not of that kind. As already indicated, the overwhelming impression conveyed by my groups was that of wanting to keep the conversation light. Even in small academic groups, any speaker who tried to take up some theme in a cognitively complex way would receive only a limited hearing. There also seemed to be a background fear of making oneself look silly - i.e. a nervousness about taking up some topic and single-handedly exploring it in front of other people. Such an action could too easily be construed as pontificating, or "showing off". And, in any event, the attempt to

think out loud in this way puts the speaker at risk of ridicule, if someone suddenly happens to detect a large flaw in his reasoning. Finally, a whole range of linguistic and paralinguistic devices - joking remarks, flippant asides, fidgets and sighs, raised eyebrows, and the like - can all be brought to bear on anyone who persists in trying to handle an informal group discussion in a cognitively complex manner.

(27) While I was observing my 30 groups, one of my supervisors suggested that I might get useful additional information by watching "serious" TV debates, and by studying ongoing debates in "serious" newspapers and magazines. I did this for a short period, but I again saw very little evidence of cognitive complexity of the truth-seeking investigative kind. If one watches a group of politicians on TV, the most conspicuous feature of their performance is the articulate way in which they speak from well-rehearsed and well-polished positions. The primary aim of adversarial debate is to win or to exculpate or to justify or to "point the finger". What we generally see when we watch politicians on TV, or follow the correspondence columns in (say) the Times Newspaper, is the exhibiting of skilled performances. All sides to the debate seem to have already heard their opponent's most telling objections, and have already honed up a range of clever-sounding answers or evasions. Mass media debates are not exercises in cognitive complexity of the quiet truth-seeking kind. They are opportunities for various parties to present conclusions or dogmas in ways which will hopefully win the day against the opposition.

(28) It has to be admitted that many people enjoy watching TV debates of the kind just described. Intelligent people will watch a TV debate and afterwards claim, with some enthusiasm, that they learned quite a lot from it. What they usually mean by this is that they heard a number of arguments and talking points (often put in a forceful and plausible way) which they had not heard before. The question that needs to be asked, however, is whether the ad hoc addition of new talking points to one's repertoire actually helps to diminish the amount of confusion in the World. TV viewers may well feel good

about having their repertoire enlarged. But TV debates, like most other kinds of debates in the mass media, are essentially conflictual in nature, and thereby tend to exacerbate and harden divisions among people. Individual viewers may well feel that a particular debate has helped to clarify their ideas on the topic discussed. But it is questionable whether there is any increase in clarity (any diminution of confusion and conflict) in the populace as a whole.

(29) For me, cognitive complexity can be legitimately described as "clarificatory" only if it moves the problem solver discernibly closer to a satisfactory (and hopefully final) solution to the problem under consideration. My worry about TV and other mass media debates is that they do not seem to facilitate this process. Debates on how to handle industrial disputes, inflation, delinquency, unemployment, terrorism, or whatever, all seem to me to be occasions for stockpiling, in an adversarial/confronting manner, an increasing number of opposing viewpoints. Notwithstanding the fact that many people seem to enjoy the thrust and parry of energetic public debate, and notwithstanding the fact that they seem to enjoy the steady proliferation of more and more "pros and cons", it seems to me that such debates actually have the counterproductive effect of making the problem seem ever more difficult, and the prospects of a satisfying solution ever more remote. If an industrial dispute gets resolved, this is not likely to be due to any great shafts of light that have been shed on the matter by the pro-ing and con-ing and (often inadvertent) mischief-making of the mass media.

(30) Where, then, can cognitive complexity of the clarificatory kind be found? As a result of persisting with this question, I became increasingly convinced that this kind of cognitive complexity is seldom a very public phenomenon. It is the sort of phenomenon that tends to manifest itself mainly in private, or in the usually-confidential company of appropriate "helpers". The author who is putting together a book, the musician who is working on a new symphony, the chess player who is composing an

original chess problem - these are all essentially one-person (hence, solitary and private) exercises in cognitive complexity. And here, of course, the aim is clarificatory. What each of these persons wants is a satisfactory solution to the problem he is addressing.

(31) With these last remarks, we touch again on the close relationship between cognitive and creativity. Just as creativity is an activity that tends to go on either (a) in private, or (b) with the assistance of appropriate "task orientated" helpers, so also does cognitive complexity tend to proceed in similar fashion. More precisely, it is cognitive complexity of a clarificatory kind, and creativity of a truly productive/inspirational kind, that tend to proceed in this essentially private and personal way. If people start getting cognitively complex in public (which usually means that they are getting cognitively complex with one another), the overall result tends to veer towards confusion, rather than clarity. At least in the long run. Similarly, it is well-known that creativity is much more of a private than a public activity. From time to time, one hears of "creative teams" being set up in the Arts and Sciences. But creativity itself tends to remain stubbornly located in the individual. It is individuals, not groups, that have bright ideas. The most that a group can do is to try to potentiate conditions under which individual creativity will flourish.

(32) Even the existence of helpers does not invalidate the points that have just been made. Great artists and sculptors etc. have often had assistants to work on their paintings or sculptures or ballet productions of whatever. Great scientists and inventors have also had appropriately qualified assistants to help test out their ideas. But, in the domain of CREATIVITY, helpers have invariably acted in a largely subservient capacity. Normally, it is just a single person who has the creative vision, and the helpers exist only to facilitate the physical implementation of the vision. Similar remarks apply in the domain of COGNITIVE COMPLEXITY. Some typical examples that come to mind are the Urban Planner or the International Lawyer (who may have a substantial staff of helpers to assist with the achieving of some cognitively complex task), and the

Entrepreneur who mobilises helpers to facilitate his various machinations and take-over bids. However, what is characteristic of examples like this is that the task of finding a solution is essentially still "driven" by a single person (the chief urban planner, the entrepreneur, etc.) who parcels out sub-tasks to helpers who will then tackle them and report back on them. So there is a sense in which even the presence of helpers does not repudiate the view that creativity and cognitive complexity are essentially one-person activities. This point can be reinforced by considering what happens in Governmental "Commissions of Enquiry", where some public figure (along with appointed helpers) is given a task of Chairing a committee of specialist advisers. This is usually a semi-public exercise in cognitive complexity which almost invariably tends towards confusion and inconclusiveness. Because of the disparate views and ideologies usually represented on such Commissions, the committee can often do little more than come up with vague formulae, and high-sounding forms of words, which lend themselves to a variety of different interpretations, and which may also gloss over certain major difficulties (to do with practical implementations, etc.) as well. There are consequently good reasons for believing that cognitive complexity of the effective/clarificatory kind is not the sort of activity that can readily go on in public.

(33) Another important factor, in the kind of clarificatory cognitive complexity that is being discussed, is the factor of time. The cognitive complexity involved in writing a book, or composing a symphony or chess problem, is of a kind that can seldom be satisfactorily hurried. And so it is with major acts of creativity. At the risk of sounding trivial, activities of this kind take as long as they take, and not a second less. This is partly because the relevant considerations have to be allowed to emerge in their own time. And it is partly because the motivation for tasks of this nature is something that tends to come in fits and starts. Even if time is pressing, there will still be occasions on which the person concerned cannot bring himself to do any more work on the subject. In the case of cognitive complexity that involves helpers, things can sometimes be speeded up by the obvious expedient of employing more helpers (or getting the

already-existing helpers to work harder). But, even here, there are limits to what can be done. The experienced entrepreneur never wants to make a take-over bid before he has had the time to "do his homework". And the professional urban planner never wants to present his plans until he has had the time to think the whole project through to his satisfaction.

(34) Since time is an important factor in both cognitive complexity and creativity, we are again compelled to think about the relationship and "over- lap" between these two differently-named fields of enquiry. Actually, this is one of the pieces of unfinished business in the present thesis. I do not pretend to be an expert on the theoretical and research literature on Creativity, but the following brief comments may indicate one way of exploring the matter further:

- (a) Even a most cursory glance at the literature on Creativity shows that it is occupied with topics that have had little place in this thesis. It deals with such matters as trying to classify types of creativity, trying to identify distinctive stages in the creative process (e.g preparation, incubation, illumination, and verification), trying to relate creativity to particular personality tests (e.g. tests of divergent thinking). It looks at the conditions under which creativity might be potentiated or inhibited, e.g. by social or cultural forces. It examines the personalities and upbringing and life-styles of well-known creative people. It looks at creativity in groups of people from young to old. It does this from a variety of different perspectives (psychology, psychoanalysis, phenomenology, biography, etc.). And so on. At the end of the day, however, when people ask what Creativity is, attention tends to get narrowed down to something like "the birth of new/novel ideas". Thus, even if we identify different stages such as preparation, incubation, illumination, and verification, it is illumination which is most clearly associated with what most people (professionals and

non-professionals alike) mean by Creativity. It is as if there is a getting ready for the Creative Moment. Then there is the Creative Moment itself - the moment when new ideas suddenly appear in one's consciousness. And then there is the often-hard work of trying to make something of the creative ideas that have appeared.

- (b) If creativity is associated purely with the birth of new ideas, there are quite a lot of creative acts that call for almost no cognitive complexity at all. For example, there are "creative advertising agencies" that dream up new names, gimmicks, slogans, and products for their clients. Quink is suggested as a special new brand name for ink. Or someone invents a new shape (e.g. square) of potato crisp. Once ideas of this kind emerge, no cognitive complexity is required to work on them. Cognitive complexity may be involved in securing patent or trademark rights, and in planning the advertising campaign. But that is another matter and is not generally regarded as being a particularly creative endeavour.
- (c) There are of course "one-off" bright ideas that are much less trivial than the square potato crisp. The invention of "cat's eyes", for helping motorists to drive in the dark, is one that comes to mind. We might also mention the (nameless) inventors of the wheel, of writing, and of knots. It seems to me that the having of novel ideas like these could be the sort of instantaneously creative act (a flash of insight) which involved the discoverer in no cognitive complexity at all. As before, cognitive complexity enters the picture only when people start trying to work out some possible consequences of their creative "Ah! Ha!" experience.
- (d) One type of creative activity which clearly involves both "Ah! Ha!" experiences and the cognitively complex study of possible consequence is

the type engaged in by people like Galileo, Newton, Einstein, Freud, and so on - innovators who effectively created whole new Systems of Thought. However, this sort of activity is not restricted to scientists. In painting the final version of Guernica, Picasso is said to have been influenced by over 40 sketches that he had made previously. And 7 photographs were taken of the work as it progressed. What we have here, apparently, is the process of bringing forth a variety of ideas and considerations to do with the way that Guernica should be painted, followed by a bringing together of the most relevant-looking ideas and considerations in the final painting itself.

- (e) Several other brief remarks need to be made. For example, I note that Creativity is sometimes conceived as a sort of almost-mystical affair - "a binding together of the primitive, irrational forces of the unconscious with the logical, rational, and cognitive mechanisms of the conscious mind" (to quote just one well-known psycho-analytically orientated author). Cognitive complexity, as described in this thesis, is a much more prosaic business. In instances such as that of the Urban Planner or the Entrepreneur, it is the systematic attempt to solve difficult problems by the diligent application of method. Even more prosaic, perhaps, is the cognitive complexity involved in planning a holiday abroad. There may well be dark un-conscious forces at work in both of these cases. But we have not found it necessary to introduce them into our analyses. And, in any event, no reference to magic or the unconscious is needed to elucidate the kind of cognitive complexity involved in first learning to cook, or to drive a car.
- (f) The relationship between Creativity and Cognitive Complexity depends on the ways in which the two classes of phenomena are conceptualised. Since Creativity tends to be conceptualised in different ways by different writers, there is no way of arriving at any firm conclusion about the relationship or

"degree of overlap". For example, some theorists seem to take the view that real creativity is something that cannot be generated by method. So any cognitive complexity (e.g. of the Urban Planner), that involves the determined application of method could not count (according to the "no method" view) as exemplifying creativity. On the other hand, cognitively complex people like Urban Planners are "bringing something new" into existence (e.g. a new town which will have the kinds of facilities that inhabitants are supposed to need). So the activities of the Urban Planner do count as creative under the definition, cited earlier, of Frank Barron. What is needed, perhaps, is a much clearer conceptual analysis of creativity. Meanwhile, we have pointed out one area of difference that seems to be common to many current conceptualisations. Whereas researchers into Creativity focus largely on the "giving birth to new ideas", our own conceptualisation of Cognitive Complexity gives equal emphasis to the process of doing something worthwhile with the new ideas. Among other things, we have spoken of the frequent need for analogical reasoning (as an idea-generating method). We have spoken of such matters, seeing-the-wood-for-the-trees, and of trying to maintain good overall control over the often-proliferating considerations that need to be taken into account. We shall later be mentioning additional factors, such as the usefulness of "recursive" and "systematic" thinking, and the preservation of corrigibility in one's thought processes. In all these ways, our emphasis differ from that of most current and past writers on Creativity. But a final verdict will not be possible until further conceptual analyses have been carried out.

(35) There is just one further example of cognitive complexity that needs to be mentioned in the present context. It regularly and inevitably involves the presence of helpers, and it is sufficiently important to warrant separate discussion, because it is to do with Teaching and Training. Teachers and Trainers are of course in the business of

trying to transmit knowledge and skills. And this involves at least two kinds of cognitive complexity - the cognitive complexity inherent in the subject matter itself (physics, chemistry, chess, tennis, rally driving, or whatever), and the cognitive complexity involved in trying to get the subject matter across to uninformed (and possibly uninterested) students. In the teacher-pupil relationship, the teacher is in possession of a body of knowledge which may call for considerable application and effort on the part of the would-be learner. A body of knowledge such as physics is one that can be acquired only as a result of bringing a large number of initially-unfamiliar considerations to bear upon a wide range of circumstances. This necessitates cognitively complex thinking on the part of the pupil. The task of the teacher is to make these considerations and circumstances accessible to the pupil, by introducing them in comparatively easy-to-grasp and motivating ways. This, in fact, is what "Educational Technology" is basically all about. If the process of subject-matter simplification can be achieved in a way which captures the pupil's interest and attention, then the teacher is the cognitively complex person who is "in the driving seat", and the pupil is the willing accomplice or helper in the joint enterprise of knowledge transmission. It is beyond the scope of this thesis to consider the educational implications of a study of cognitive complexity. But it seems likely that a deeper educationally-orientated study of the phenomenon would yield useful results. Among other things, a study of cognitive complexity might help to explain why some pupils (even pupils of high I.Q.) find it so hard to grasp certain kinds of subject matter. It might also help to explain why the teacher's best efforts to simplify such subject matters so often meet with failure. In this connection, we have already mentioned the hazards and confusions that can occur when two or more people (e.g. a teacher and his pupils) start to get cognitively complex with one another. We have also mentioned the importance of time in bringing cognitively complex thinking to a successful conclusion. If teachers are given too large a curriculum to get through, shortage of time will almost guarantee that certain pupils will fail to carry through their cognitively complex thought processes to the kind of successful conclusion that (say) the formal examination system requires.

(36) The 35 sections that have just been written are not by any means a complete account of the numerous ideas and "leads" that I managed to cull from the 30 groups that I studied. Some additional material will be presented later. Meanwhile, the 35 sections do constitute a fairly coherent and self-contained set of ideas. They also have the advantage of being easily relatable to the prior account of the discussion on poor performers. So the reader should not have to much difficulty in seeing how the contents of the 35 sections suggested themselves. No doubt other researchers would have noticed somewhat different things. Since the objective of the exercise was conceptual clarification, what got noticed by me was very much determined by my own conceptual progress at the time. After reading through the 35 sections that have just been presented, readers must judge for themselves whether or not they consider the exercise to have been worthwhile. So far as I am concerned, I felt that the study had very much enriched my understanding of how cognitive complexity might be best conceptualised and researched.

(37) For me, the overall study was helpful even in comparatively small ways. For example, the first instance of cognitive complexity that I was able to potentiate was in respect of environmental conservation. The second was to do with capital punishment for terrorists. These experiences immediately called attention to the inadequacy of trying (in the manner of Lichtenberg and Hock) to restrict the notion of cognitive complexity to the domain of interpersonal perception. Another point that struck me most forcibly was the impoverished nature of attempts to comprehend cognitive complexity in terms of "stimulus dimensions" and "multi-dimensional information processing". As I witnessed, again and again, the babble of confusion that so often characterises informal gatherings, I was further struck by the fact that "more dimensions of meaning" does not necessarily mean "more accurate thinking", or more "clarification". All too often, it just means chaos. But this seriously undermines suggestions (by researchers like Bieri) that a person who has more dimensions of judgement, for judging other people, is somehow likely to be superior to a person who has fewer dimensions of judgement. The superior judge is not necessarily the person who has "the most" dimensions of judgement - i.e. as

many dimensions as are necessary to arrive at an accurate assessment of another person, and no more. The point to be noticed is this. A person who has "more" dimensions of judgement may well be able to say "more" things about other people than someone who has fewer dimensions of judgement. So his evaluations of other people may well look (and be) more sophisticated. But greater sophistication does not imply greater accuracy. Who is to say what an accurate assessment would be of President Reagan, or Freud, or (for that matter) one's own next-door neighbour? And are we really being cognitively complex when we make snap multi-dimensional judgements of other people? Or is it rather the case that we are exhibiting what has become for us a fairly automatic skill? The more closely one looks into questions of this kind, the more doubts one begins to have about the views and approaches of theorists and researchers like Bieri.

(38) Enough has been said, perhaps, to convince the reader that the 30 groups produced some quite radical shifts in my thinking about cognitive complexity. In effect, there was a dual process going on - an undermining and destroying of old ideas (the conventional wisdom), and the creating of new ideas to take place. In section 37, I listed a few of the ways in which my experience with the groups led me to chip away at assumptions deeply embedded in the mainstream literature. But there were other doubts and misgivings as well. For example, I became increasingly aware of the fact that the customary methodology of experimentation in this area was highly suspect. It is simply not possible to potentiate cognitive complexity, in any significant form, by getting people to answer simple questionnaire-type questions, or by getting them to express preferences with respect to (say) works of art, or by inviting them to cluster the nations of the world into different groupings. So, as my doubts about the traditional approach increased, so also did my confidence in the replacement ideas that were suggesting themselves. I think I can therefore claim, with some assurance, that my study of the 30 groups provided a strong empirical basis for the re-conceptualisation presented in chapter 4.

Some Follow-Up Findings

There is just one final matter that calls for extended comment, and it concerns the follow-up dialogues that I had with Mark. As indicated earlier in the chapter, the design of my protocols explicitly made provision for the making of follow-up checks on points and issues of interest. One such follow-up was my ancillary investigation of so-called "serious" debates in the mass media. Most other follow-ups were of a comparatively minor kind, involving little more than speaking to members of gatherings after the event to ask them what they meant by such-and-such, or how they felt about so-and-so. But my follow-up enquiries with Mark were of a much more substantial kind. Over a period of several months, we met in his office (just the two of us) and talked for an hour or two about a variety of topics, mostly of a wide-ranging (psychological, socio-economic, technological, political, and moralistic) kind. There was no formal agenda. We simply chatted over coffee with a view to my getting a better insight into the unusually interesting kind of cognitive complexity that Mark so regularly seemed to display. For his part, Mark seemed entirely happy just to have someone to talk to in a serious way because, like myself, he found most social chit-chat rather superficial and dogmatic in content.

As a result of these dialogues (some of which I tape recorded, with his prior permission), and as a result of hearing his talk from time to time with other people as well, I gathered what seemed to me to be a rich crop of rather tantalising insights into the nature of his distinctive way of thinking.

(a) First of all, I noticed that he had what I can only describe as a "recursive" or "iterative" way of thinking - a way of thinking which refused to accept arbitrary starting points (for often-intricate chains of reasoning), and which was forever raising questions which most other people would take for granted. For example, if someone remarked that a railway line was being closed in the North of England because it was no

longer making money, Mark would say something like, "Ah! But the question of whether a line makes money depends on how the money gets distributed in the first place. If the Government creates large pools of unemployment in some area of the country, railways are obviously going to be less used. Apart from the fact that people don't have money to pay for train fares, they don't have any jobs to commute to." Mark would then go on to point out numerous "knock-on" consequences, almost all of an adverse kind, that were likely to follow the closure of railway facilities (leading, in some cases, to the progressive isolation and running down and demise of entire working class communities). He would also contrast this state of affairs with the millions of pounds being spent on the development of high-speed air-conditioned railway trains for business executives. "It's always been possible to cream a bit more money off the well-paid executive. But, if you want to make savings with the poor, you have to cut back on their facilities - e.g. by closing down their main means of transport, or by herding them into fewer trains...."

(b) Again, if someone suggested that unemployment might be a major cause of teenage crime, Mark would raise questions as to why unemployment seems to be so unacceptable, psychologically, to so many teenagers. Did they not have the inner resources to enjoy the luxury of not having to take dreary jobs? Had the educational system let them down? Had society conditioned teenagers into believing that they were "no damned good" unless they could afford to buy the goodies that are constantly being displayed in mass media advertisements?

(c) Another example of Mark's thinking arose when he was asked if he had any ideas on how to control one's emotions. He began with the remark that, for most people, their emotions were their control systems - so the question was a bit like asking how we can control that which controls us. He then went on to say "I wonder what it is that makes people angry in the first place, and then experience the pain of anger which then makes them want to control themselves. What is it that makes people brutal, and

then want to cultivate compassion?" This was followed by further remarks about the difference between control and understanding, and the difficulties that many people seem to have in even understanding why they are angry. "What happens is that people get into a state of increasing frustration, and then there is some "last straw" effect that makes them blow up. They might explode, for example, because their soup is too hot - but that isn't the real reason for their anger at all. To go into this question properly, I think we would have to look at the nature and origins and consequences of frustration - the desire to struggle with situations that one doesn't like, and the condemnation that arises in us when we meet resistances...." Mark then proceeded to spend the next half-hour elaborating on the problem of frustration.

(d) What is characteristic of each of the last three examples (railways, teenagers, emotion) is that they all induced Mark to start digging much more deeply into what might be called "the more basic reasons" for the events/phenomena under discussion. To many people, the fact that a railway line was losing money would be an entirely adequate reason, in their minds, for closing it. Not so with Mark. In this and all other matters, he was constantly striving to look behind the superficial appearances and explanations - always wanting to ask more questions and search for deeper causative factors. It was interesting, also, that Mark seldom came up with what often seemed to me to be the most obvious talking points. For example, it might be pointed out that, if railways are to be closed when they stop making money, then facilities such as public libraries and police forces and armies might be cut back or disbanded for similar reasons. But Mark's analyses always seemed to proceed at a much deeper level than that. He was always in the business of trying to find out, rather than score easy debating points. Where other people saw significance, he tended to see triviality. And where other people saw triviality, he tended to see significance.

(e) In making these remarks about Mark's way of thinking and talking, I am not wanting to press the claim that his analyses were necessarily always correct or "superior". But it is surely safe to say (i) that they were substantially more penetrating than those of most other people, and (ii) that they generally took account of a much wider range of considerations. In other words, his analyses seemed to range both wide and deep. Another characteristic of his thinking is that he was always able to elaborate on any point on which he was challenged. This was in fact the feature of his thinking which most convinced me of its authenticity. If people are coming out with unusual-looking analyses which they have adopted from other sources (books, or religious sects, for example), there will be limits to their ability to elaborate in extenso on certain points of difficulty. What they are able to say will be limited to what they have read or heard. No such limitations were even apparent in Mark's case. In addition to being able to elaborate on any point that I took up with him, he could just as easily elaborate on the elaborations as well! One of the great difficulties, in fact, was bringing serious conversations with him to a close. One felt that he could go on talking indefinitely about certain topics - and always in his distinctively original-way.

(f) When a person habitually comes up with original and high-quality remarks and analyses, one naturally wonders where they came from. As I got to know Mark better, I discovered that he had, over a period of some 10-15 years, developed an entirely different World View - a new ontology and epistemology, and the rudiments of a new cosmology as well, that were all distinctively his own creation. It was this that first called my attention to the possible significance, in effective or "clarificatory" cognitive complexity, of independence of thought (and, once again, this latter notion is never far removed from the notion of creativity). Almost every topic that I took up with Mark was given some radically unexpected "gloss" by him. From time to time he lost me, because I simply did not have the range of concepts that was in his possession.

(g) Another interesting feature of Mark's thinking was its seeming impartiality and open-endedness. When talking with him, it was very rare to hit upon a topic that he could not at once start talking about in an interesting and coherent way. And yet I never received anything that felt like a pre-packaged or dogmatic reply. In every case, an attempt was made to think the topic through, as if from first principles. Humility and patience were two additional features of Mark's approach. There was never any hint of arrogance or showing off of the "I-already-know-the-answer-to-this-one" kind. Instead, there was a genuine desire to probe into the topic from the standpoint of one who "didn't really know" the answer at first, but who would like to discover more about its ramifications. Patience manifested itself in the unhurried and detailed way in which he tried to come to grips with problems of interest. And he would often correct himself as he went along, saying things like, "No, what I said just now can't be quite right because of...." This led me to notice another recurring feature of his thinking - an abiding concern with corrigibility. At all stages of his reasoning, he seemed to be mentally on the alert for possible mistakes in his reasoning. It was Mark who first convinced me that it was possible to have cognitively complex thinking of an authentically truth-seeking kind.

(h) At the very heart of Mark's world view was his conviction, well worked out, that all the major problems of the world stemmed from what he described as "communicational incompetence". This sometimes led to quite heated exchanges with his academic colleagues. Someone would say, "The problems in this Faculty are not communicational, but are due to a straightforward clash of interests." There is just £10,000 in the research kitty for the coming year, and there are 4 groups who each want £4,000. There is no communicational problem there, because everyone knows exactly what the problem is." To this, Mark might reply, "Yes, I agree that the problem that you are now confronting looks like a straightforward clash of interests. But don't you see that this clash of interests would never have arisen unless there had been a prior history of inept communication, inducing expectations in people that cannot now be fulfilled?"

And don't you also see that if you had more communicational competence, the parcelling out of the £10,000 would not be such an emotionally draining task?"

(i) One consequence of Mark's emphasis on communicational competence was that it put him very much at odds with what he would sometimes describe as "our rewards and punishments society". He would say things like, "Look, I tell my son that I will buy him a car if he passes his next batch of examinations. What he hears, however, is that he won't get a car unless he manages to meet my aspirations for him. But that's not the worst of it. What sort of relationship do I have with my son, if I am in a position to buy him a car that he wants, but refuse to do so unless he pleases me?"

(j) It would take far too long to enumerate the many other examples that I received of Mark's original way of thinking. Mark used to deny that he was being cognitively complex when he embarked on one original analysis after another. But this is because he had what was for him a very clear generative basis (a generative basis grounded in his world view) for thinking in the way that he did. It was this generative basis that constituted the "system" behind his thinking. People who have no generative basis for dealing with particular problems can still be "systematic" (e.g. orderly and tidy) in the way in which they try to identify crucial factors, etc. But systemic thinking is qualitatively different insofar as it implies the underlying presence of a coherent and informing System of Thought. At times, it was quite an extraordinary experience to listen to Mark. For example, he once launched into a series of speculations about the cosmology that might have been developed by humans, if their sensory equipment had been similar to that of bats. Could an intelligent bat, who was truly blind, ever come to think that there was a sun surrounded by planets? And what sort of time sense would an intelligent bat have? Would it, for example, live in a restrictive world of "whens" and "untils"?

It will no doubt be apparent to the reader that these follow-up dialogues with Mark enriched still further my thinking about cognitive complexity. First and foremost, they called my attention, in a quite forcible way, to the enormous gulf that can exist between cognitively complex thinking of the clarificatory kind, and cognitively complex thinking of a "confusional" kind. Although Mark was in some respects unlike any other thinker I had met, it takes only one person (and this is the point that matters) to demonstrate the possibility of really high-powered systemic reasoning. What I witnessed in Mark was thinking of a genuinely truth-seeking kind - a diligent application of investigative reasoning which was always aimed at clarification, rather than (say) the need to show off or score easy points. In comparison, the kind of thinking that one sees in informal groups, and in mass media debates, seems very superficial indeed. Using Mark as a yardstick, I was able for the first time to take seriously the view that what passes as cognitive complexity in informal gatherings and mass media debates is, to a large extent, a kind of cognitive perplexity - a sort of airing and acting out of personal confusions that arise as a result of people discovering that others do not agree with them.

Finally, it was Mark who reinforced my growing conviction that a very different kind of methodology is required for the systematic study of cognitive complexity - especially cognitive complexity of the clarificatory (truth-seeking) kind. By its very nature, the type of thinking exhibited by Mark requires time, and an encouraging environment, in which to manifest itself. This being so, the experimental study of cognitive complexity must provide these conditions. This is an appropriate topic to broach in the next chapter, in the context of a discussion of further experiments that I carried out.

CHAPTER 6

THE METHODOLOGICAL CHALLENGE

Methodology and its derivation

Towards the end of chapter 4, in the section on Research Implications, I remarked that one hallmark of a good scientific definition is "its ability to suggest promising-looking research projects, along with an appropriate methodology for pursuing such projects".

When I made that remark, I did not at the time elaborate on the relationship between finding a topic, and choosing an appropriate methodology. Neither did I elaborate on the more general relationship that definitions and methodologies bear to researchers' overall conceptualisation of the subject matter concerned. Even so, my remark seems fairly non-controversial. If we take Barron's (1953) definition of what he refers to as possible "Complexity - Simplicity Dimension of Personality", we find him tentatively defining this as:

"----- a bipolar factor which opposes a preference for perceiving and dealing with complexity to a preference for perceiving and dealing with simplicity, when both of these alternatives are phenomenally present (e.g. in a given visual field) and when a choice must be made between them."

Because of the emphasis that Barron gives (both in the above passage and elsewhere in the same paper), to such words as 'perceiving' and 'dealing with' and 'preference' and 'choice', it therefore comes as no surprise to see him employing the Barron-Welsh Art Scale as his primary methodological instrument. The Barron-Welsh Art Scale was explicitly designed for experimental situations in which subjects are

required to look at (i.e. perceive) pictures and to deal with them in ways which reveal certain preferences or choices.

Similar remarks apply to Scott and Bieri and later workers. Since Scott (1962) defined cognitive complexity as being "the number of independent dimensions - worth of concepts the individual brings to bear in describing a particular domain of phenomena", it was entirely appropriate for him to examine the different ways in which his subjects classified given entities (such as the Nations of the World) into groups. As in the case of Barron, his choice of methodology was wholly consistent with the definition that he opted for.

It is worth emphasizing, however, that my remark in chapter 4 spoke only of the ability of a good definition to suggest an appropriate methodology. Definitions of phenomena as complex and wide-ranging as cognitive complexity (or intelligence, or creativity, etc.), even when accompanied by extended elucidations of their intended meaning, can never do more than suggest or indicate or "point towards" a possible class of methodological approaches - namely, that class which seems to be conversant with the definitions being offered. The researcher still has to make a choice as to which of several possible methodologies he will use. And, although he may not realise it at the time, his choice of methodology will eventually (i.e. via the research findings that emerge) influence the ways in which the original conceptualisations and definitions get refined. In other words, the processes of conceptualising and defining influence (but do not uniquely determine) the research methodology that gets used. And the findings that result from the application of the chosen methodology, will in due course react back to influence (but again not uniquely), the nature and direction of further conceptualisations and definitions.

At first sight, this way of proceeding might seem to be quite unexceptionable - almost inevitable, in fact. A research topic is named, a bit of conceptualising and

defining is done, a suitable looking methodology is chosen, results come in and get translated into "findings". And these are later written up in professional journals for subsequent workers to build upon or tangle with. The problem, however, is that this way of proceeding leaves far too much to chance. Too much is left implicit or unsaid "in the air". Too much is left unexplained or unjustified. Above all, there are too many opportunities for the making of sub-optimal decisions, and for the overlooking (or glossing, or sloughing aside) of matters of importance - i.e. matters that need to be dealt with rather carefully, if research is to proceed in an orderly and non-arbitrary way.

Suppose, for example, that a researcher were to define some phenomena in a way which ideally calls for the use of George Kelly's Repertory Grid Technique. Suppose, also, that the researcher knows very little about this particular technique, so that he is either (a) unaware of its relevance and superiority, or (b) unable or unwilling to try to master the Grid Technique within the time at his disposal. The chances are that he will adopt, as his main investigative instrument, a technique or methodology that he is conversant with - e.g. Guttman Scales, Likert-Scales, Paired Comparisons, or Osgood-type "Semantic Differential" Scales. So, if he happens to be particularly experienced in the construction of Semantic Differential Scales, the likelihood is that he will adopt a Semantic Differential Methodology, rather than a Repertory Grid Methodology. And he will do this notwithstanding the fact that it may not be the best tool for the job.

The adoption of a sub-optimal methodology might not, at first glance, seem to be a major cause for concern. After all, an expert in Repertory Grid Methodology could always come along, at some later stage, and try to rectify matters by using his preferred methodology. But appearances can be deceptive. The trouble is that, by the time the new expert arrives at the scene, the prior application of (say) the Semantic Differential Methodology will already have given research in the area a gentle (and no doubt inadvertent) push in the wrong direction. Among other things, certain slightly -

misdirective results (e.g. correlations that are significant, but not as high as might be expected) will have become enshrined in the research literature. And certain theoretical terms will have been given nuances which "tailor" them to the data obtained, and which in consequence help to conceal the sub-optimality of the Semantic Differential approach. This will in turn give the impression that the Repertory Grid expert is doing something different, rather than something better.

The central difficulty is the one that was mentioned three paragraphs back. In psychological research as a whole, there are too many opportunities for compromises, evasions, sub-optimal decisions, and (most insidious of all) a "mutual tailoring" of theoretical concepts and methodology and empirical data. In practice - and this is what matters - what a researcher does will depend largely on such factors as the time and the resources that he has at his disposal, the kinds of subjects that he has ready (e.g. cheap/captive) access to, and so on. The "resources" available to a researcher will include such things as data collecting equipment, appropriate laboratory or field conditions, guidance from other people, facilities for analysing data, and (in addition) such personal attributes as his own knowledge and ability and perceptiveness and motivational drive. Lack of the appropriate time or knowledge or motivation or guidance or equipment or subjects, etc. can all bias and (hence) limit the validity of the results that researchers obtain.

What is at stake, then, is not just a matter of choosing an inferior methodology. Rather, it is a matter of whole projects proceeding (perhaps through lack of time and essential resources) under possibly sub-optimal conditions, and under the guidance of subjective judgements and taken-for-granted assumptions which never get talked about in the final write-up, and which (if they were talked about) might well cast serious doubt on the validity of the findings. Logically, there are two kinds of mistakes that researchers can make. They can either (a) fail to uncover findings which need to be uncovered (and which, given a different approach, are in fact capable of being

uncovered). Or they can (b) come up with findings which, because of the partially-faulty reasoning involved, seem to be more valid than they really are.

In saying this, I might appear to be saying little more than what every psychological researcher already knows - namely, that psychological research is full of pitfalls and is therefore difficult to do well. However, there is one matter that I am here wanting to single out as being of special importance. It is something of a "taboo" topic within the community of psychological researchers, because it is concerned with the way in which the failure to do things well gets systematically suppressed in the professional research literature.

One occasionally reads research papers in which the author is refreshingly frank about the difficulties that he encountered, or the loose ends that he has left, or the problematic assumptions he had to make, or the possible weaknesses in the methodology that he chose, etc. But there are obvious limits to the number of admissions of this kind that can be made in a single paper. Confessions of inadequacy, if too abundant or too highly emphasised, merely ensure that the paper never gets published! For example, I cannot recall ever having read a scientific paper in which the author admitted that he was not really competent to cope with matters of crucial importance to his argument. Writers occasionally admit to not knowing certain things, or having to take professional advice on such matters as the statistical analyses that they conducted. But they invariably go on, almost in the same breath, to explain that such deficiencies in no way invalidate their main conclusions.

At the end of the day, when the research is completed and the write-up appears in print, the impression that readers usually get is that of a piece of research which was (a) handled in a competent (or even exemplary) manner, and (b) conducted under conditions in which everything ran comparatively smoothly. Among other things, the experimenter seems to have had a basically sound idea, an appropriate way of

conceptualising it, adequate time (and money, and laboratory/field conditions etc.) to do what he wanted to do, a suitable sample of subjects to work on, the right methodology and equipment etc., the competence and facilities to apply the methodology effectively, and the ability to carry through the requisite analyses and interpretation to a successful conclusion.

Occasionally, a few 'setbacks' do get mentioned. For example, a researcher might report some finding that he was not expecting, and which seems to run counter to the general drift of his argument. But, even here, considerable kudos seems to attach to researchers who are able to "explain away" awkward results in ingenious ways. The overall effect of such writing is to convey an image of research which is fundamentally sound and worthwhile, both in its conception and its execution. Nothing seems to have gone seriously wrong, and there do not seem to be any worrying disparities between the way in which the topic needed to be researched, and the way in which it actually was researched.

Barron's Methodology and Terminology Revisited

If we read Barron's own (1953) account of how he came to posit the possible existence of a "Complexity-Simplicity Dimension of Personality", we learn that the idea first occurred to him in the context of research that he was conducting (along with a colleague by the name of G.S.Welsh), in the general area of "perceptual preference". The original experiment (by Welsh) was one in which each subject was presented with several hundred line drawings in black ink and on 3" x 5" cards. The cards were presented one at a time and, for each drawing in turn, the subject was asked to say whether he liked it or not. The drawings were thus sorted into just two piles (the liked and the not-liked) according to the preferences that the subject expressed.

Over-generalised use of the word 'perception'

Experiments on perceptual preference can range over all the senses (sight, hearing, smell, taste, touch.....). And, within any given sensory domain, these are what some psychologists describe as ancillary "stimulus classes". The sense of sight provides the greatest number of ancillary stimulus classes - enabling experimenters to establish "perceptual preferences" for paintings, sculpture, children's doodlings, geometric figures, poetry, architecture, and so on.

For any chosen stimulus class, the methodology can, within limits, vary. For example, drawings may be presented to subjects one at a time, as in the Welsh text. Or they may be presented as an array (two or more at a time), to see which of several items the subject likes best. Alternatively, subjects might be invited to rank order a whole set of pictures in rough order of preference. Or they might be asked to divide them into groups, according to stated likes and dislikes, or to assign them to points on (say) a sort preference scale (e.g. running from "like-very-much" to "dislike-very-much"). In some cases, subjects might be asked to give reasons for their preferences. In other cases, the reasons might simply be inferred. If a set of paintings includes a number of still-life pictures of flowers in vases, and if a subject asserts that he does not like any of them, it is probably safe to infer (without explicitly checking on the matter), that drawings of this kind do not particularly appeal to him.

The methodological devices just described can be utilised over a whole range of perceptual situations. As already indicated, the visual modality provides the widest range of possibilities. (By contrast, there are much greater limits to what can be done in respect of, say, preference for odours.) Perhaps it should also be noticed that experiments in perceptual preference can range simultaneously over several sensory domains - as in the case of drama or ballet or opera, where performances can provide a whole variety of likes and dislikes with respect to such matters as sight and sound and

mode and standard of presentation.

For the sake of completeness, let us also notice that "perceptual preference" is for some psychologists a catch-all heading which can be used to cover perceptual experiences of virtually any kind. Investigations into preferences for danger (as opposed to safety), preferences for particular ideologies or belief systems (political, religious, economic, or whatever), preferences for certain kinds of strategic (e.g. military or commercial) plans, preferences for authoritarianism rather than permissiveness, preferences for particular kinds of sensory experience, preference for particular kinds of people or pets, preference for certain Rorschach Ink Blots, all qualify as "Experiments in Perceptual Preference" - notwithstanding the fact that there is nothing obviously perceptual about (say) beliefs and ideologies. Unlike pictures and smells which can be perceived through our senses, beliefs and ideologies are the sorts of experiential entities that it would seem better to describe as "cognised". People do indeed talk about the way in which they perceive certain kinds of beliefs and ideologies, etc. But this use of the word 'perceive' is manifestly different from (and more general than) the kind of usage which is restricted to the perception of sights, sounds, smells, tastes and touches.

Over-generalised use of the word 'preference'

Having expressed doubts about characterising Barron's work as being in the domain of perceptual preference, let us now voice a few misgivings about the word 'preference'. If we read Barron's (1953) paper as a totality, we find it consistently urging the view that some people - either by nature, or by virtue of their parental upbringing - really are more complicated (in the sorts of ways that Barron describes) than others. But, as Barron gradually piles up more and more correlational data in support of this view, the tendency towards complexity (or simplicity) begins to look less and less like a preference, and more and more like a case of inevitability.

If a person has arthritis in his legs, it would be odd to say that he has "a preference" for walking with a limp. It is rather the case that he either (a) cannot avoid limping, or (b) can walk in a natural-looking way only by making a concerted (and possibly painful) effort to conceal his arthritic condition. By the same token, a person who is ambitious or envious can hardly be described as exhibiting "a preference" for getting on, or for coveting what other people have. It is more a case of his being in the grip of urges and dispositions which he can, at best, only partially conceal.

Similar observations apply to Barron's conceptualisation of the complex person. For example, he makes a sustained attempt to relate what he describes as a "preference for Complexity" to certain difficulties (including oral fixation) that the complex person might have experienced in early childhood. At one point Barron speculates on the way in which complexity might be related to early oral deprivation.

Now it seems to me that if these difficulties of infancy and early childhood really do have the effect that Barron is attributing to them, they are doing more than building up, in the child, a "preference" for complexity. Rather, they are making sure that the child ends up growing into a complex person.

The point to be noted is, that the use of the word 'preference' is inappropriate in cases where one's whole psychological constitution, virtually rules out the possibility of acting in alternative ways. For example, it makes little sense to say that Jews have 'a preference' for belief in God, or that acknowledging God is 'a preference' for believing Jews. In both cases, the word 'preference' is important being the alternative (belief in God, and believing Jews), but its use is inappropriate when discussing Judaism, where there is no alternative but to believe in God. Another example, is that a person might have a slight preference for dry wine, as opposed to medium-dry wine. He might have a strong preference for blondes, as opposed to brunettes. In which case there is very little

chance that he will ever 'prefer' a brunette - in other words, there is no alternative because of this psychological disposition towards blondes.

At this point, it is important to say, that although it is possible to argue at length about the appropriateness or otherwise of Barron's (1953) use of words such as 'perception' and 'preference' in his experimental methodology, it was a pioneering study in the cognitive complexity field. If we follow Barron's reasoning, we find that the main taken-for-granted assumption is that people who show certain kinds of "perceptual preference" on the picture test that he developed with Welsh, are people who can, by virtue of that fact alone, be legitimately categorized as complex. There is no lack of explicitness on Barron's part with respect to this particular experiment. For example, when reporting how he has written up his data he says:

"..... we shall adopt two conventions, one with regard to the scale and the other with regard to the designation of the Ss. The Barron-Welsh Art Scale will hereafter be referred to as a measure of the variable 'Complexity', since it is that feature of the scale which is of interest here, and since the scale is so scored that preferences like those of artists (hence, preference for the complex) earn S a high score, while preferences like those of people in general (i.e. preference for the simple) earn a low score. The designation 'Complex person' and 'Simple person' will be employed to indicate a modal high scorer and a modal low scorer, respectively on this particular test."

Again, in his summary of his overall findings on Complexity, Barron says that he "notes" a pattern of relationship to it:

- "1. It is related positively to personal tempo, verbal fluency, impulsiveness, and expansiveness.
2. It is related negatively in one sample of naturalness, like ability, lack of deceitfulness, adjustment, and abundance values, but in other samples a revised form of the measure shows no significant relationship to these variables, so that the finding must await further checking before being credited.
3. It is related positively to originality, good taste, and artistic expression, and its revised form in two other samples shows significant positive correlations with intellect, sense of humor, breadth of interest and

cathexis of intellectual activity (none of which were significantly related to it in the first sample).

4. It is related positively to sensuality, sentience, esthetic interest, effeminacy, and femininity in men.
5. It is related negatively to rigidity and constriction.
6. It is related negatively to control of impulse and to breakdown of repression.
7. It is related negatively to political-economic conservatism, to subservience to authority, to ethnocentrism, and to social conformity.
8. It is related positively to independence of judgement."

Barron's summary can be described as explicit tempered with an air of caution in certain cases. However, his endeavours at being explicit in the reporting of his research findings, does little to justify why he was content to adopt what can only be called a sub-optimal methodology. Barron's findings on Complexity would have been more credible had he based his research on a methodology which allowed his subjects to exhibit their cognitive complexity, instead of forcing them into a situation where they had to make a 'preference' or choice.

The Need for an Explicit Methodology

All scientific research proceeds under the determining influence of assumptions which vary in explicitness and validity. In literature on the methodology of the behavioural sciences, a great deal has been said on the subject of validity (and on the related topic of reliability). Much less has been said about explicitness. And yet it is fairly obvious that if a researcher is not explicit about certain aspects of what he is doing - if, for example, he is not clear about the way in which he is defining his terms, or the theory he is subscribing to, or the background assumptions that guide his experimental design and analysis, or the rationale for interpreting (and/or speculating about) his results in the way that he does - then there are bound to be question marks with regard to the overall validity of his work. In this sense, explicitness is an important pre-condition of

validity.

"Total" explicitness is not possible

At the same time, it needs to be noticed that there is no such thing as "total" explicitness in matters relating to definition of theory. If we wish to be explicit about (say) our conceptualisation of cognitive complexity, we have to use words and explanations which in their turn may need to be made more explicit. Since these additional words may also be in need of further clarification, there may be no end to the process. In any event, it is obvious that each new demand for greater explicitness will, if acceded to, extend the exposition, until it finally becomes too lengthy to be acceptable for publication.

In practice, researchers are always obliged to compromise on the matter of explicitness. Typically, they will try to be explicit about some aspects of their work (e.g. those aspects which they think their readers might misconstrue, or to be uncertain about). And the rest of their work will proceed on the basis of assumptions which they feel can be taken-for-granted, either (a) because it would take up too much space to go into them, or (b) because the assumptions in question strike them as being uncontentious (or, at the very least, uncontentious to the specialist target audience that they are addressing). This state of affairs can naturally give rise to further misgivings about validity. If a research paper seems to have been influenced by certain assumptions that the researcher omits to mention, we cannot be sure whether the researcher has (a) failed even to consider them, or (b) consider them (possibly at some length), but did not deem it worthwhile to mention the fact in his write-up.

How, then, can a researcher draw the line between (a) being too explicit, and (b) being not explicit enough? To some extent, the answer to this question is governed by already-existing traditions in the research area under investigation. For example, if a

researcher is studying correlations between IQ scores and examination results, it will probably not occur to him to take time to consider whether the IQ tests that he is using, are appropriate instruments for testing the kinds of intellectual abilities that the examinations call for. He is more likely to assume, like countless researchers before him, that the IQ tests in question are appropriate. In other words, this particular aspect of his work will have (for him) the status of a taken-for-granted assumption. However, if a researcher deliberately elects to challenge some long-standing tradition, explicitness does indeed become necessary. Long-standing assumptions do not readily yield to lightweight or vaguely-formulated objections. The objections must be clearly expressed, and made to bite. This is the main reason why chapter 4 of this thesis, devoted so much space to challenging traditional conceptualisations and methodologies, in the field of cognitive complexity, to convince the reader this is not through lack of trying to be explicit.

In general, limitations of space put considerable pressure on writers to be no more explicit than they consider necessary. Explicitness will therefore be primarily reserved for those aspects of the research that the researcher regards as being particularly novel, or contentious, or "likely to be misconstrued". Everything else will proceed on the basis of assumptions that the researcher feels can be taken for granted, or at most, mentioned in only a minimal fashion. As already indicated, this can leave the reader wondering whether certain kinds of assumptions have been adequately considered or questioned - or, for that matter, noticed at all.

How then do we posit an explicit methodology?

Our conceptual discussion in chapter 4 surely suggests the need for a methodology that actually allows cognitive complexity, as we have construed it, to be displayed. This is more than can be said of the research of Barron (which provided only minimal opportunities for the display of cognitive complexity - and, indeed, did little to

compel the exteriorisation of any cognitive complexity that subjects might have "had"). It is also more than can be said of Scott, Bieri, and others - whose experiments tap only minor and tangential "aspects" of cognitive complexity.

We have also seen how the findings of people like Barron are almost bound to follow their methodologies. The challenge is to find a methodology that enables (or encourages, or forces?) subjects to exhibit cognitive complexity, if this is what they are inclined to do, or capable of doing..... Glimmerings of this methodological requirement were present, even before the re-conceptualisation was finally worked out. We were aware that some kind of experimental set-up was required in which subjects would be free to exhibit any kind of cognitive complexity - the dithering, hesitant, incisive, subtle kind etc. One way of meeting this requirement would have been to watch a sample of people working on intellectual (or skill-building) problems over substantial periods of time. But this method was thought to be impracticable (in terms of the amount of time it would take), for a Ph.D project, which had already taken some considerable time in the efforts to re-conceptualise cognitive complexity.

Choosing an Appropriate Methodology

The methodology chosen was one which was firmly based on our re-conceptualisation of cognitive complexity discussed in chapter 4. It took into account Man's unique ability to engage in investigative reasoning using language, and also, that during this reasoning process, he is capable of taking into account a substantial number of relevant "considerations" or "themes" or "topics" - something we have called a BREADTH OF CONTEXT factor. Entrenched into the methodology was something we described earlier in the thesis, as a DEPTH OF NESTING factor, i.e. where the person is capable of probing and digging into a topic in some depth, and then emerging again with some conclusions, without losing sight of the original problem that he set out to solve.

Also, the methodology chosen was one which would facilitate the display by the subjects of more than one kind of cognitive complexity. In chapter 1, we distinguished between incisive cognitive complexity that leads in the direction of clarity, and the muddleheaded cognitive complexity that leads in the direction of confusion. We also discussed in chapter 4, the possibility of researchers distinguishing between effective cognitive complexity and ineffective cognitive complexity. In a nutshell, the methodology adopted was the one which would best facilitate an outward display of any kind of cognitive complexity the experimental subjects might have, and one which gave them a chance to struggle with the unfamiliar. (which Barron (1953) did not give his subjects a chance to do.)

Rationale for the Methodology Adopted

Earlier in this chapter, we had suggested (and rejected for reasons of lack of time) that one situation in which subjects would be free to exhibit any kind of cognitive complexity, would be to work on intellectual (or skill-building) problems over substantial periods of time. Another approach was to record free discussion on for example, "topics of the day".

Support for this approach came from my work on the protocols of the 30 groups involved in my unobtrusive observation of cognitive complexity discussed in chapter 5. During the time I was setting up this pilot experiment, I became increasingly aware that cognitive complexity could only be observed in a relatively free and uncontrolled and naturalistic environment. And hence the reason why I set out to construct an experiment of the unobtrusive observation of cognitive complexity, in "coffee table" situations at the Open University.

From the findings of the 30 groups which I observed, several very important indications about the kind of methodology required to encourage the display of cognitive complexity emerged.

1. First of all, it seems that cognitive complexity is not seen in informal groups - because the person who is engaged in discussing a topic has to face a mixture of assorted distractions and interruptions originating from other members of the group. Also, the person who is engaging in a cognitive complexity exercise needs to proceed at his own pace - he needs time and privacy to think through a particular problem.

2. The only kind of cognitive complexity worth engaging in, is the kind that veers towards clarity. And this "clarificatory" kind of cognitive complexity is seldom a very public phenomena.

3. Related to these last points, we note the close relationship between cognitive complexity and creativity. Just as creativity is an activity that tends to go on either in private or with the assistance of appropriate helpers, so does cognitive complexity of a clarificatory kind. Creativity of a truly productive/inspirational kind, and clarificatory cognitive complexity, tend to proceed in an essentially private and personal way.

4. Creativity and effective/clarificatory cognitive complexity are essentially one-person activities. They both need helpers to facilitate the flow of ideas, and require time in which these ideas can be expressed. The informal group is not therefore an ideal situation in which ideas can be "aired" and developed - as the participants can get irritated and impatient over a more "pensive" member; and also the group may break up at any time for various reasons. Certainly, the informal gathering is not a suitable occasion for sustained problem solving of the kind Mark invited his gatherings to engage in.

5. It is possible to be a member of a group and to get out of participating in the mainstream discussion. Usually, there is a lack of any "serious" discussion in informal gatherings. They tend to be light-weight affairs, because that is what most of the participants want.

6. If issues/topics are taken in a serious way by the participants in an informal group, the problem arises between people being cognitively complex, and people seeming to be cognitively complex. Often people try to "score points", or try to "act clever" when participating in a discussion, so that it is important to get to know the subjects well enough to be able to make the distinction with reasonable confidence. Only if I know the subjects well enough will I be able to distinguish genuine cognitive complexity from "pseudo" cognitive complexity.

From the last six points, the case is getting stronger all the time for adopting a methodology which is away from the traditional approach of informal groups and questionnaire design, to one of a free discussion with a subject on a one-to-one basis. My follow-up dialogues with Mark confirmed this point. He was quite happy to meet in his office and talk for an hour or two (some of these discussions were tape-recorded, with his prior permission), about a variety of topics. And these chats over coffee gave him time and an encouraging environment, in which he could display his cognitive complexity about various issues.

It was these meetings with Mark and the type of issues that we discussed (with the inevitable display of cognitive complexity), that convinced me that any methodology which was going to encourage the exteriorisation of cognitive complexity in subjects, had to be one which was a free discussion (i.e. a private interview) on, for example, "topics of the day". In other words, a discussion on issues/topics which were familiar to the subject.

The reader will recall, that in our re-conceptualisation of cognitive complexity in chapter 4, comment was made about the word 'unfamiliar' in our definition of cognitive complexity. And that there is a negative correlation between familiarity and cognitive strain. The greater a person's familiarity with a given problem, the smaller the cognitive strain involved in coping (or attempting to cope) with it. Thus, if some subjects in an experiment were asked to discuss some topics in the news at the time, they would be familiar with the issues, and so should not find it difficult (i.e. a "strain") to talk about them at length. On the other hand, topics in the news are quite often sufficiently removed from the immediate experience and environment with which a person is familiar, that he is sufficiently removed (or unfamiliar), from the intricate details of any particular event. More concisely, a person is usually sufficiently unfamiliar with events reported in the news, in the sense that, he does not adequately understand all the problems associated with them. Any discussion with him would therefore, give him a chance to struggle with the unfamiliar, and display any cognitive complexity that he might have. It is fairly safe to assume that most people have some "glimpses of understanding" concerning events reported on TV, or the radio, or in books or journals or newspapers, but these bits of specialist information are often redundant when trying to solve unfamiliar problems.

However, because the type of interview proposed did employ topics of the day, and to some extent depended on subjects being fairly widely read (if not on the immediate issues, at least on related ones), people who were known to me at the Open University (i.e. academics), and elsewhere; were used in two further experiments.

Proposed Methodology for the Interviews

Various people known to me at the Open University, would be asked if they would like to take part in an interview with me, about topics of the day reported in the news and other media. The interview could be held where the subject liked: in their

office or in a room in their home. They were told that it was a very informal procedure conducted round a coffee table, with the subject sitting comfortably in an armchair. All they would be required to do, is to discuss some topics of the day with me. They could talk for as long as they liked about any one topic, and the interview would finish when they felt they had nothing more they wished to contribute to the discussion. Before the discussion commenced, I would ask the subject if I could tape record the interview, as part of a research programme I was carrying out into the nature of cognitive complexity. If necessary, I would explain a little bit about it.

A Trial Run: the '5 Topic Interview'

The methodology discussed in the previous section, was used in the '5 Topic Interview': an experiment I contrived to set up about 3-4 years ago.

Twelve people, who were course co-ordinators, research assistants and postgraduate students (i.e. people who were involved in some specialised area of academic work, but who were not part of any mainstream academic team involved in writing course units), were invited by me to be interviewed individually on 5 topics in the news at the time. These topics were:

- (1) Poland
- (2) Violence on TV
- (3) Balloons: Solar Energy
- (4) Third World
- (5) Hunger Strikers

The topics were discussed in the same order from subject to subject, to maintain continuity. If at any one time during the discussion on a certain topic, a subject started to "dry up", then the interviewer encouraged further discussion by asking the subject a "prompt question". Some of these prompt questions are listed with their appropriate

topic in Table 2 on the next page.

Most of the subjects took approximately 1-1.5 hours to complete their interview (it took between 1-2 months to interview the 12 subjects), and no interview was interrupted by breaks for lunch etc.

Table 2

Topics and Prompt Questions for the
'5 Topic Interview.(also used in the '8 Topic Interview')

(1) Poland

- (a) How do you see the present situation in Poland?
- (b) Do you think it is significant that there is a Polish Pope at the moment?
- (c) Have you ever visited Poland, or have you any friends who live there?
- (d) Do you think that Russia is a potential threat to Poland?

(2) Violence on TV

- (a) Have you any views about violence on TV?
- (b) What do you consider to be a violent act?
- (c) Do you see sports like boxing, karate and fencing as fringe violence?
- (d) Would you say that violence in TV programmes aids violence in families?

(3) Balloons: Solar Energy

- (a) The other weekend, a fellow crossed the channel using a balloon and solar energy. Do you see ballooning as a form of transport in the future?
- (b) Are you interested in alternative forms of technology, like the use of solar energy for heating?
- (c) Have you seen any of the solar energy projects which have been set up in Milton Keynes?

(4) Third World

- (a) Have you got any ideas about the development of the third world politically and economically?

Table 2 continued

- (b) Do you think organisations like Oxfam and Tear Fund can help in any way?
- (c) Have you ever visited or worked in any third world countries?

(5) Hunger Strikers

- (a) I expect you have read about the situation in Northern Ireland, and the prisoners on hunger strike in the Maze prison in Belfast. Do you think these prisoners should be given political status?
- (b) Would you say that they are prisoners of conscience?
- (c) Do you think that the hunger strikers families should intervene and stop the strike?

Findings

Once the 12 interview transcripts had been transcribed (an exercise which took nearly 2 months), they were carefully scrutinised for indications of cognitive complexity, and any other interesting points which may have emerged. Some observations about the '5 Topic Interview' were as follows:

1. At least 8 of the subjects had attempted to engage in some kind of investigative reasoning. Their transcripts showed evidence that they had tried to bring a number of considerations to bear upon, for example, the situation in Poland, and they had tried to go in depth in their particular argument. (i.e. there was evidence of breadth of context and depth of nesting in their transcripts.)

2. These 8 subjects also attempted to struggle with the unfamiliar in their discussion of the topics. At times they were very pensive, and appeared as if they were thinking their way through the particular problem. At other times, they were trying to justify the particular stance they had adopted. They even contradicted themselves at certain stages during their discussion, and sought to put the situation right by offering some plausible explanation. (i.e. the "No, that can't be right" syndrome).

3. The transcripts of the remaining 4 subjects showed the kinds of cognitive complexity which was of the dithering or confused or muddled kind. (i.e. the "Can't make up my mind" syndrome). There was no display of clarificatory cognitive complexity or subtle cognitive complexity as mentioned in points 1 and 2, largely because their cognitive complexity was of the secondhand kind. i.e. they had memorized the details about the topic they were discussing from their reading of a newspaper account or a book.

4. Finally, at least 8 of the subjects seemed really incensed in their comments on the topics of violence on TV, the third world, and hunger strikers, i.e. they seemed to be "one-subject people". They could talk at length about one or more of these particular topics, but knew very little about, for example, the situation in Poland, or the use of solar energy.

The above findings gave me further "leads" as to the type of interview I should set up, in order to maximize the possibilities for subjects to exhibit their cognitive complexity, and led on to the development of the '8 Topic Interview'.

The Main Experiment : the '8 Topic Interview'

The '8 Topic Interview' was an extension of the '5 Topic Interview', which I set up some 3-4 years ago.

Sixteen people, who were involved in mainstream academic life either at the Open University, or elsewhere, were invited by me to be interviewed on 8 topics. The first 5 topics were the same as those used in the previous interview, with the addition of 3 new ones:

- (6) Hobbies
- (7) Advice to Someone Getting Married
- (8) My Job

Table 3

Additional Topics and Prompt Questions
for the '8 Topic Interview'

(6) Hobbies

- (a) Have you any hobbies or pastimes which you indulge in outside of your work?
- (b) Do you take part in any sports or physical activities?
- (c) Are you interested in decorating your home?

(7) Advice to Someone Getting Married

- (a) Have you any advice for someone getting married?
- (b) Do you still go along with the idea of marriage?
- (c) Would you advise that couples should live together before they get married?
- (d) Do you believe in the extended family?

(8) My Job

- (a) Can you tell me what you think your job at University/College involves?
- (b) Does it give you career satisfaction?
- (c) Are you looking for promotion?
- (d) Do you belong to any committees?

The three more personal topics were added to the topics of the day (i.e. current affairs issues), because there were indications in the findings from the '5 topic Interview', that subjects could be "one-subject people". And, it was highly probable that of the sixteen academics interviewed, at least two or three of them would be "one-subject people". i.e. able to discuss a certain topic at length, but be totally naive in other fields. By introducing some personal topics such as hobbies, marriage and their job, into the interview, it would be possible to get an indication of whether subjects can be cognitively complex in one or two areas, or whether they can be cognitively complex "right across the board".

The same procedure of presenting the topics, and encouraging discussion by the use of prompt questions was employed, as for the '5 Topic Interview'. A list of the additional topics with their prompt questions can be found in Table 3 on the preceding page.

Most of the sixteen subjects took between 1.5-3 hours to complete their interview (they were interviewed over a period of 1-2 months), so that on some occasions the interview was interrupted for a brief break to make another cup of coffee, or to "stretch" their legs etc.

The transcription of these interviews took a further 4-6 months, and the analysis of them even longer. The experimental data and the analyses are discussed in the next chapter.

CHAPTER 7

THE EXPERIMENTAL DATA

The analysis of the '8 Topic Interview' data attempted to "exemplify" the theoretical and methodological stance that the thesis took in chapters 4, 5 and 6. After the interviews were transcribed, I took a first look at the data to see what kind of analyses I could use.

Initial Analyses

1. Impressionistic Analysis

In this analysis, I read through the transcripts and noted down the different types of cognitive complexity (e.g. the dithering, confused, subtle, clear kind, etc) that each subject showed. I then compared one subject's transcript with another, to get an indication of the "quality" of the answers to each topic, and also noted the length (i.e. quantity) of the answers. This was done to see if there were any topics in the interview which the subjects "just could not discuss", but this was found not to be the case.

2. Pen Pictures

From these initial observations gleaned from the impressionistic analysis, I then wrote a pen picture for each subject. This described how a subject conducted himself during the interview, and quoted "extracts" from his particular transcript. I also made some light-weight "what-I-happened-to-notice" comments (with respect to the subjects cognitive complexity), by way of interpretation of these extracts.

3. Content Analysis

From my initial observations of each of the subjects idiosyncracies and odd quirks, I then performed a content analysis on the interview data. A survey of the literature on content analysis as expounded by workers such as Holsti (1968), Stone (1964), Osgood (1959), Berelson (1952) etc., convinced me that a qualitative approach needed to be adopted with respect to my data. In other words, I was interested in the content delineated by any one category (which I shall now describe), and whether it was either present or absent in any one subject's transcript.

The identification of the categories took a circular form. Some "broad" categories were defined which had been "thrown-up" from the impressionistic analysis and the pen pictures, and then the transcripts were scrutinised for evidence of these categories and various indicators were identified. According to the suitability of the category, it was either accepted or rejected, and if rejected; the process continued again. This very time consuming exercise was employed at least thirty times on all of the 16 transcripts.

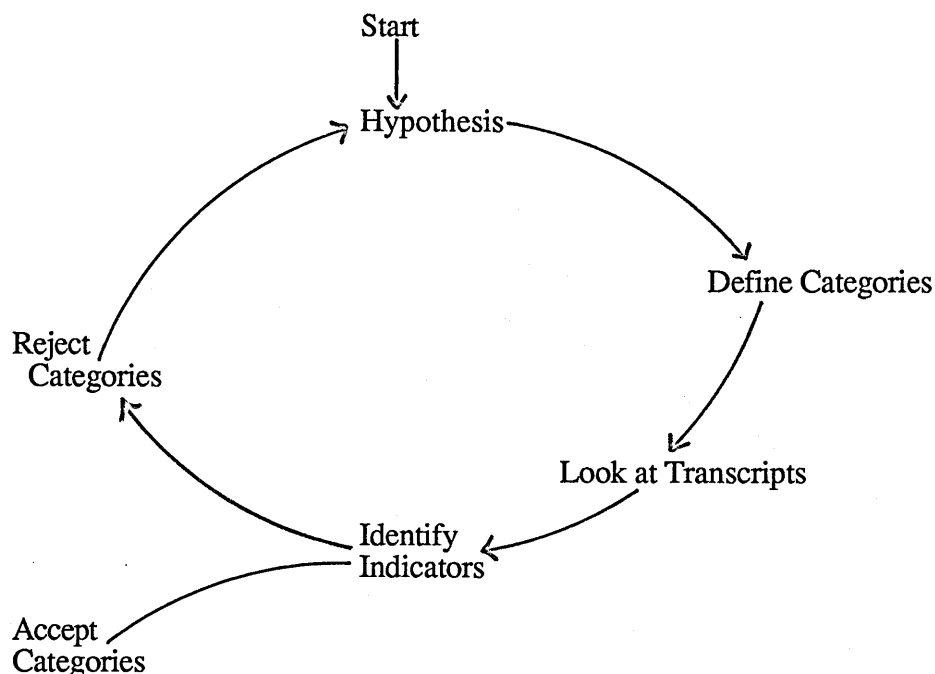


Figure 2. The Process of Category and Indicator Identification

Although some thirty-three categories (e.g. Comments on Questions, Dogmatic Statements, Cynicism/Suspiciousness, Self-Appraisal [Self-Assessment]) emerged from this process, they were more relevant to some theses, for example on dogmatism, posturing, cynicism etc, than work in the area of cognitive complexity. The categories were only a tangential/peripheral relevance to the way in which I had re-conceptualised cognitive complexity in chapter 4. Accordingly, the content analysis was abandoned after 1 year, because it was neither necessary nor sensible to do any further work on it, and so the findings on the categories were written up in two research papers. (Watts. 1983a, 1983b.)

From these findings, I decided it was therefore necessary to go back to my re-conceptualisation of cognitive complexity in chapter 4, and to develop techniques of analysis which would categorise various types of cognitive complexity.

Analysis Techniques

In chapter 4 p. 81, I stated that the best definition of cognitive complexity that I could formulate was as follows:

"Cognitive Complexity is the name given to a mode of mental functioning that arises when an attempt is made to solve unfamiliar problems by bringing a variety of different considerations to bear upon them."

The problem with the analysis of the transcripts was to develop techniques which I could apply directly to this definition.

One possibility was to devise techniques of analysis based on the Biological Limit on Man's ability to process information, i.e. he has only finite information-processing capabilities. (Reference. chapter 4.p.101.) So that there is a limit to how much information he can cope with at any one time. Therefore, if Man is faced with an unfamiliar problem which he is unable to solve "at a glance", he has to break it down into appropriate parts which he can deal with in a piecemeal fashion. (These parts are called sub-problems by the Problem-solving Theorists). These sub-problems are further broken down into sub-sub-problems, until the component problems are small enough to be brought within Man's finite information-processing capabilities. He then pieces together the solutions of the sub-problems and sub-sub-problems, until a solution is reached for the original problem. This then, is how Man goes about solving unfamiliar problems by bringing a variety of different considerations to bear upon them. More concisely, this search for relevant-looking considerations is really a search for ways of breaking the original problems down into manageable components.

Now, the subjects taking part in the '8 Topic Interview', were engaged in this process of breaking a problem down into smaller parts. Each topic area which they talked about at length posed certain questions. And these questions could be ones they

asked themselves about the topic area under discussion, or they could be in the form of comments on the interviewer's question or rhetorical questions. If a subject "dried up" in trying to formulate an answer, the interviewer supplied him with a prompt question to stimulate his thinking on the topic again. But, whichever kind of question the subject was "struggling" to solve, he was in reality attempting to solve an "unfamiliar problem" by a breaking down process.

Given that a subject arrives at some sort of a solution from the solutions of the sub-problems and sub-sub-problems which are the result of this breaking down process, he has in effect been struggling with the unfamiliar, so is ipso facto in a state of cognitive complexity, irrespective of whether or not his struggling is successful. (Reference. chapter 4.p103.) He has probably been able to bring in a large number of different things/factors as being relevant to solving the sub-problems or sub-sub-problems (the breadth of context factor referred to in chapter 4.p79), and has been able to dive into the various facets of the sub-problems or sub-sub-problems and emerge again without getting lost. (The depth of nesting factor referred to in chapter 4. p80.) That is, the cognitively complex subject is capable of "bringing a variety of different considerations to bear upon" a problem.

The way a cognitively complex subject goes about solving an unfamiliar problem, gives us clues as to possible categories which could be developed to identify types of cognitive complexity.

The theoretical foundations for the basis for the identification of the categories mentioned in the above paragraph, came from suggestions made by my supervisor. Lewis (1974), in a report entitled: 'New Methods of Assessment and Stronger Methods of Curriculum Design', outlines a procedure to help clarify the meaning of starter concepts, and how they are related to one another. Of the ten exploratory questions he advises to be followed to aid a person's understanding of starter concepts, five of them

can be used as a basis for a procedure which I require in order to identify, name and define the categories which can be developed to identify types of cognitive complexity. If for the word "concept" in Lewis' table (1974. P.28) we read "category", then the first five operations form a procedure for selecting the categories. The modified version of the Lewis operations is shown in Table 4 on the next page.

Four categories were constructed from the procedure shown in Table 4. These were:

(1) Breaking Down

Breaking down a problem into components or sub-problems.

(2) Solving

Solving sub-problems or dealing with components.

(3) Bringing Together

Bringing together sub-problem solutions and/or component outcomes.

(4) Synthesis

Providing a synthesis.

Although these four categories identified the main steps in problem-solving, what was of interest to me, was how they were related to types of cognitive complexity displayed in the transcripts.

Main Analysis

In this analysis, the four categories were developed to identify types of cognitive complexity. They were related to the types in the following ways:

Table 4

Procedure for Selecting Categories(After Lewis 1974)

- (1) Define each category in turn.
- (2) Examine antonyms and synonyms.
- (3) List examples of the valid use of each category.
- (4) List examples of the non-valid use of each category.
- (5) Locate examples/situations of a borderline kind, for which there is some doubt as to whether a given category can be validly used.

1. The cognitively complex subject would clearly display each of the four categories. i.e. (1) Breaking down, (2) Solving, (3) Bringing together and (4) Synthesis in his answers on a particular topic. (Reference. chapter 4. p103, 79, 80) The four categories would thus be clearly identifiable, and could be coded (1), (2), (3) and (4) accordingly.

2. The subject who is not "truly" cognitively complex would show some disjunction in his answers on a particular topic. i.e. there may be evidence in his answer that he is, for example, breaking down the problem (question) into smaller parts, but then in his discussion of these parts, he gets "lost" and does not know how to conclude his answer. There is in effect, little or no breadth of context or depth of nesting in his answer (Reference chapter 4. p79, 80). Thus, when it comes to coding this subject's answer (1) Breaking down, (2) Solving, (3) Bringing together and (4) Synthesis, only categories (1) and (2) are clearly identifiable, while categories (3) and (4) are not. Different types of disjunctive cognitive complexity can be displayed by the subjects in their transcripts (with respect to the category combinations), and these will be described in detail in the next section.

Types of Cognitive Complexity

1. True Cognitive Complexity

Where the subject clearly displays each of the four categories i.e. (1) Breaking down, (2) Solving, (3) Bringing together and (4) Synthesis in his answer (Reference chapter 4. p103), which also shows breadth of context (Reference chapter 4. p79) and depth of nesting (Reference chapter 4. p80). The four categories are clearly identifiable and can be easily coded (1), (2), (3) and (4) respectively.

True cognitive complexity can be divided into two sub-types:

(a) Outstanding

Where the subject gives superior quality examples of true cognitive complexity and,

(b) Pedestrian

Where the subject gives more everyday and ordinary examples of true cognitive complexity.

2. Disjunctive Cognitive Complexity

Where the subject does not clearly display each of the four categories i.e. (1) Breaking down, (2) Solving, (3) Bringing together and (4) Synthesis in his answers. In disjunctive cognitive complexity, only two of the four categories are clearly identifiable. There are three possible category combinations.

(a) End Categories Combined

Where categories (1) Breaking down and (2) Solving are clearly identifiable, but categories (3) Bringing together and (4) Synthesis are combined.

(b) Middle Categories Combined

Where categories (1) Breaking down and (4) Synthesis are clearly identifiable, but categories (2) Solving and (3) Bringing together are combined.

(c) Beginning Categories Combined

Where categories (1) Breaking down and (2) Solving are combined, and only categories (3) Bringing together and (4) Synthesis are clearly identifiable.

3. Borderline Cognitive Complexity

Where the subject only displays clearly one of the four categories i.e. (1) Breaking down, (2) Solving, (3) Bringing together and (4) Synthesis in his answers. There are two possible category combinations.

(a) Last Three Categories Combined

Where category (1) Breaking down is clearly identifiable, but categories (2) Solving, (3) Bringing together and (4) Synthesis are combined.

(b) First Three Categories Combined

Where categories (1) Breaking down, (2) Solving and (3) Bringing together are combined, and only category (4) Synthesis is clearly identifiable.

4. No Cognitive Complexity

Where the subject is unable or unwilling to answer a question on a topic, and therefore none of the four categories are displayed. i.e. (1) Breaking down, (2) Solving, (3) Bringing together and (4) Synthesis are combined.

5. Secondhand Cognitive Complexity

Where the subject's answers show evidence that he has either memorised some relevant key points and details from a book, or has "taken on board" someone else's arguments and ideas, and then regurgitates them as if they are his own.

Having identified the types of cognitive complexity with respect to their category combinations, the transcripts of the 16 subjects were then coded (1) Breaking down, (2) Solving, (3) Bringing together and (4) Synthesis accordingly. (A procedure which took 3-4 months.) Only the best examples (i.e. extracts) of the category combinations were chosen from the transcripts. At the end of each extract or group of extracts a comment was written about the type of cognitive complexity exhibited by the subject, and also the constituents displayed. A summary of the best examples of category combinations (with reference to the types of cognitive complexity), is shown in Table 5.

Table 5

Summary of Best Examples of Category Combinations

Type of Cognitive Complexity										
The '8 Topic Interview'	True Cognitive Complexity		Disjunctive Cognitive Complexity			Borderline Cognitive Complexity			No Cognitive Complexity	Secondhand Cognitive Complexity
	Outstanding	Pedestrian	(3) (4)	(2) (3)	(1) (2)	(2) (3) (4)	(1) (2) (3)			
1. Poland	Mark	Bill	Bertram		Ben	Bertram				
2. Violence on TV					Ben				Robert	
3. Balloons: Solar Energy		Nevill		Ben						
4. Third World		Ben Joss								Arthur
5. Hunger Strikers		Adrian							John	Derrick
6. Hobbies			Bill			Arthur				
7. Advice to Someone Getting Married		Bill	Lance						Bertram	
8. My Job	Mark							Robert		Lance

Results of the Analysis

Two types of analyses were performed on the results of the analysis : a quantitative and a qualitative analysis.

1. Quantitative Analysis

Some calculations were performed on the information in Table 5, with respect to the best examples chosen, and the types of cognitive complexity they displayed.

- (a) The best examples were chosen from 11 out of 16 transcripts. i.e. 69% of the subjects were represented in the best examples.
- (b) From Figure 3, we can see that all of the 16 subjects exhibited true cognitive complexity at some time during the interview, 5 subjects displayed some form of disjunctive cognitive complexity, 3 subjects had borderline examples, 4 subjects used information which was secondhand in some of their answers.

2. Qualitative Analysis

The types of cognitive complexity were evenly distributed across all of the topics (Reference to Table 5). But, as this thesis was concerned with the display of true cognitive complexity and not so much with three or four other types of cognitive complexity, more examples of true cognitive complexity were chosen than the others. However, it is worthy of note that the other types of cognitive complexity are also evenly distributed across all of the topics. A summary of the types of cognitive complexity and their constituents which were displayed in the best examples, can be found in Table 6.

Figure 3. To show the Distribution of the Types of Cognitive Complexity Across All of the Subjects and All of the Topics in the '8 Topic Interview'.

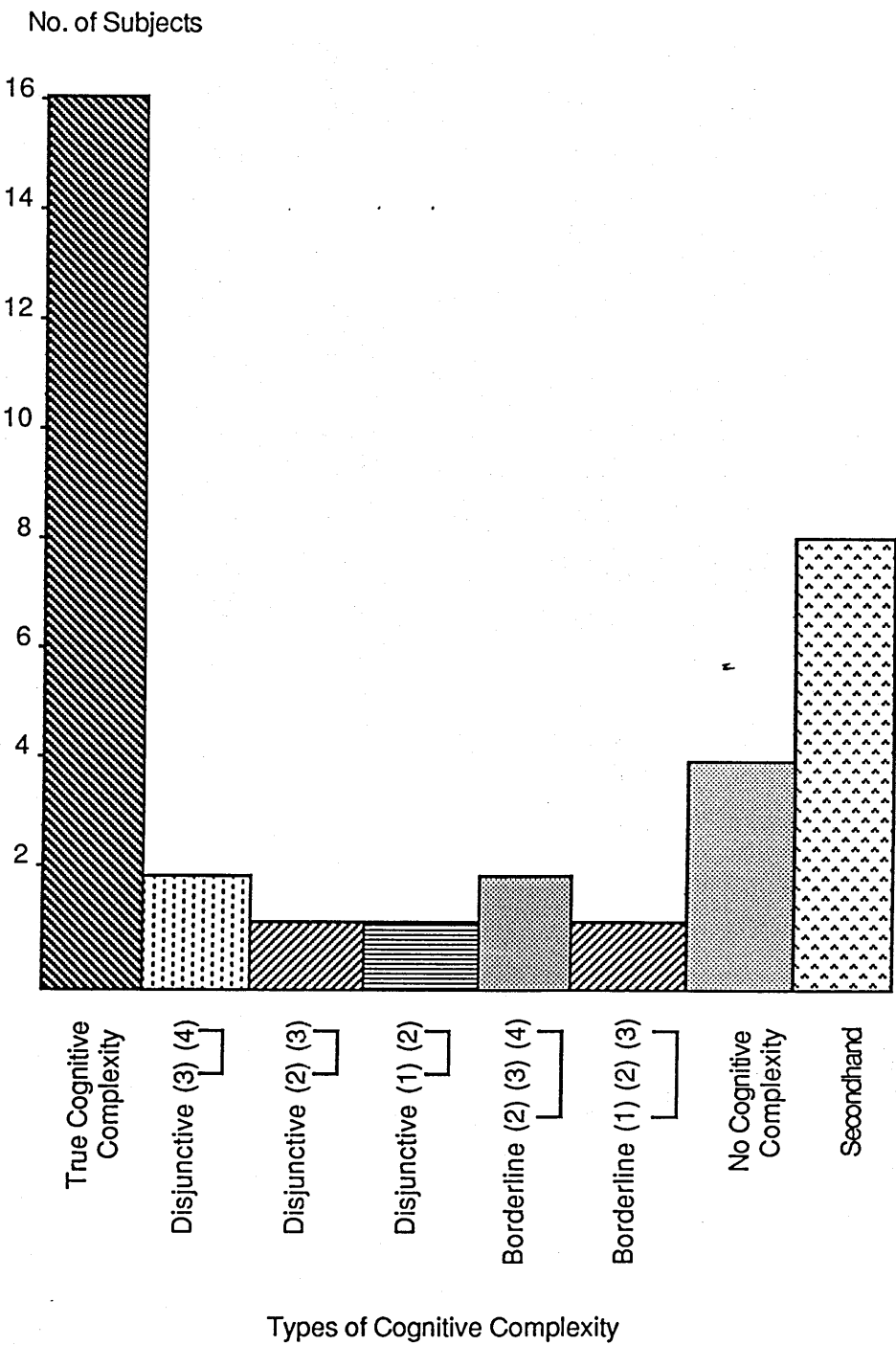


Table 6

Summary of Types of Cognitive Complexity and their ConstituentsDisplayed in Best Examples

Type of Cognitive Complexity	Constituents Displayed	Major References Chapter (c) Page (p)
<u>1. True Cognitive Complexity</u>		
<u>(a) Outstanding</u>		
(1) Breaking down	systemic thinking	c5.p141
(2) Solving	communicational incompetence	c5.p167, 168
(3) Bringing together	world view	c5.p166
(4) Synthesis	independence of thought	c5.p166
	clarificatory thinking	c5.p169
Categories (1), (2), (3)	truth-seeking	c5.p169
and (4) clearly identifiable	investigative reasoning	c5.p169
	sees the wood for the trees	c4.p108
	recursive/iterative way of thinking.	c5.p163-164
	"knock-on" consequences	c5.p164
	penetrating thinking	c5.p166
	wider range of considerations	c5.p166
<u>(b) Pedestrian</u>		
(1) Breaking down	analogical reasoning	c4.p107
(2) Solving	investigative reasoning	c5.p140
(3) Bringing together	systematic approach	c5.p140-141
(4) Synthesis	clarity	c4.p87
	"knock-on" consequences	c5.p164
Categories (1), (2), (3)	incisiveness	c4.p87
and (4) clearly identifiable	sees the wood for the trees	c4.p108
	alternative considerations	c5.p140
	recursive /iterative way of thinking	c5.p163-164
	communicational incompetence	c5.p167-168
	patience	c5.p167
	unhurried thinking	c5.p160, 167
	detailed thinking	c5.p167
	lucidity	
	simplicity	
	"one-subject man"	c4.p112-113
	controlled by emotions	c5.p164-165
	anger	
	annoyance	
	corrigibility	c5.p167
	chain cognitive complexity	
	effectiveness	c4.p105-107
	creativity	c4.p105-107
	already thought about ideas	c5.p142-143
	remembered details	c5.p145
	secondhand ideas	c5.p145

Table 6 continued

Type of Cognitive Complexity	Constituents Displayed	Major References Chapter (c) Page (p)
<u>2. Disjunctive Cognitive Complexity</u>		
(a) <u>End Categories Combined</u>		
(1) Breaking down (2) Solving (3) Bringing together (4) Synthesis) <u>Combined</u>	abrupt ending secondhand information mental catalogue digressions cynicism	c5.p145,148-149 c1.p3-4
Only Categories (1) and (2) clearly identifiable	confused thinking muddled thinking	c4.p87-88 c4.p87-88
(b) <u>Middle Categories Combined</u>		
(1) Breaking down (2) Solving) (3) Bringing together) <u>Combined</u> (4) Synthesis	investigative reasoning evaluative complexity	c4.p117
Only Categories (1) and (4) clearly identifiable		
(c) <u>Beginning Categories Combined</u>		
(1) Breaking down (2) Solving) <u>Combined</u> (3) Bringing together (4) Synthesis	creative approach novel answer	c4. p106-107, c5.p154-155
Only Categories (3) and (4) clearly identifiable		
<u>3. Borderline Cognitive Complexity</u>		
(a) <u>Last Three Categories Combined</u>		
(1) Breaking down (2) Solving) (3) Bringing together) <u>Combined</u> (4) Synthesis)	doubts misgivings hesitancy dithering	c1.p3 c1.p3
Only Category (1) is clearly identifiable		

Table 6 continued

Type of Cognitive Complexity	Constituents Displayed	Major References Chapter (c) Page (p)
(b) <u>First Three Categories Combined</u>		
(1) Breaking down)	shopping list	
(2) Solving)	<u>Combined</u>	
(3) Bringing together)		
(4) Synthesis		
Only Category (4) is clearly identifiable		
<u>4. No Cognitive Complexity</u>		
<u>All Four Categories Combined</u>		
(1) Breaking down)	arrogance	
(2) Solving)	complicated thinking	c4.p87-88
(3) Bringing together)	<u>Combined</u> wariness	c4.p112
(4) Synthesis)	defensiveness	c4.p112
	justifications	
No Category clearly identifiable		
<u>5. Secondhand Cognitive Complexity</u>		
<u>Evidence of memorised facts and regurgitated arguments and ideas</u>		
Categories (1), (2), (3) and (4) are not identified, as this is the subject of another thesis	academic study	c5.p148-150
	another person's remarks	c5.p148-150
	evidence of reading	c5.p145, 148-150
	complicated thinking	c4.p87-88
	remembered facts	c5.p136-137,142-144
	convoluted thinking	

Extracts from the Transcripts

1. True Cognitive Complexity

(a) Outstanding

- (1) Breaking down
- (2) Solving
- (3) Bringing together
- (4) Synthesis

Categories (1), (2), (3) and (4) clearly identifiable.

Mark

Poland

Mark talking on the situation in Poland. He says that the word communication is used in society largely to mean any exchange of symbols.

"Now, I don't as it happens. I think there are two categories of the exchange of symbols, and I would only call one of these categories 'Communication', because I think that disputation, (which actually takes up most of the exchange of symbols within our society is disputation), people are trying to prove something, or disprove something, or persuade, or do something of this sort. Rhetoric, I think rhetoric has nothing to do with communication. I think largely, it's kind of misuse of language. But it does have the effect, of course, that in the event that people proceed in these fashions, these rhetorical ways, rather than understanding what is going on with their communicational processes, then, the communicational processes will go wrong. And the phenomenon that will arise when their processes do go wrong, will have the appearance of dispute, and they won't actually be able to resolve the disputes. They will continually be trying to do some kind of censorship, or delaying action, or just voyaging their way out of disputes without changing anything fundamentally. And so

① Breaking down

consequently, you get procedural decisions, but these decisions are not actually acceded to by the people subject to them, because they simply can't accede to them. They may feel themselves forced to accede to them overtly, but they can't actually do so. I mean, if somebody is actually living in a state of deprivation, and they find themselves talking to some slick bureaucrat who tells them either that they deserve to be, or that there's nothing that can be done about it or what-not, I mean they may accept some formal decision from him, but actually their state of deprivation, the degree to which they will be energised to actually try to change the situation can't be altered. You can't go on sweeping the muck under the carpet indefinitely. But this tends to happen, and people begin to argue about backlogs of disputes, and this Polish thing is a perfect example. No doubt what has happened, is that they have got themselves into progressively deadlocked committee structures and the like, and pricing schemes or whatever. If there is a bureaucratic procedure, it will be formalised. There will be rules about it, there will be questions of proper channels and that kind of thing. And, in general, when there are complaints there will be an attempt to defuse the complaint, rather than look at the system and see whether there is anything that can really be done about it. Largely because people live in a kind of muddle, and they always say, 'Well, we can't get on to anything now. That's not within our terms of reference. That would mean appealing to a higher committee, or a higher authority, or something like that.' So that basically, there are demands for solution to problems within constraint-sets, that ensure that the problems can't be solved."

② Solving③ Bringing together④ Synthesis

This is an excellent example of Mark's systemic thinking which came from his underlying world view, that all the major problems of the world stemmed from what he described as "communicational incompetence". (Reference chapter 5. p167) Here, Mark is being very cognitively complex with respect to his original analysis of the situation in Poland. He has a very clear generative basis (which is grounded in his world view) that constituted the "system" behind his thinking. Mark's response shows independence of thought (Reference chapter 5. p166), and cognitive complexity of the clarificatory kind. Here, Mark's thinking is of a genuinely truth-seeking kind - and an application of investigative reasoning that leads to clarification of the problem. (Reference chapter 5. p169).

More concisely, Mark is capable of bringing a variety of considerations to bear

upon the Polish problem, and he can struggle with the unfamiliar, and he can see the wood for the trees. (Reference chapter 4, p83, 84, 102-103, 108.)

My Job

Mark maintains that most academics aren't aware of their own limitations.

"Well, one can see that there are norms you know, the way people look at themselves, and in our society in general is a very..... Our society is a very assessing society, and an evaluating society, and um.. they assess themselves largely by comparative standards..... I'm better than such and such, but I'm not as good as such and such, and no worse than such and such.. And..... um.., the result is that if there is a group, and there is an error which is shared by all of them they will all be oblivious of it. And that can make an absolute change that is over the whole group, and can mean that the whole group is in effect incompetent in certain respects. But since that particular mode of incompetence will not in turn enter into comparisons within the group, they will be completely unaware of it. And most of them, it seems to me in my experience of academics, and it's very important to say this goes for me as well right to to..., well... 1975 at least.... um, have a good command, or some command, good or bad of their technical subject. But they have no very great appreciation of the student's problems in the learning, or what actually must be the conditions if the student is to learn adequately. So they tend to present the matter from the point of view of the logic, or the ethos of the subject. More the logic if it's on the mathematical side, more the ethos if it on the social side.. um...., but they are looking into the subject; they're not looking at the student's problems in a learning situation. And it goes..um.. I had a sort of, what I thought was a breakthrough appreciation of the .., of what the problems were in learning, and I listed a set of things which it seemed to me were absolutely essential pre-conditions. If the student is not given these pre-conditions for learning, some particular....., well whatever it might be, it might be an algorithm. Usually an algorithm in technology. But possibly just an appreciation, then if they are not actually provided with those conditions, then their rate of learning will be greatly reduced. A great problem. And in fact if they then continued pushing at the students more and more information, when the first parts, if something has any structure, and the first parts are not properly learned, then any subsequent material will be absorbed, if it is absorbed at all; by a pneumatic process and not by a process of comprehension. And I also began to see, that very large numbers of my colleagues had in fact learned their subject that way. So in fact they were not even equipped to convey comprehension of the subject,

① Breaking down

② Solving

only content. And the way they would expound content wasn't particularly congenial to the students absorbing it. And yet they were unaware of this problem, and they were overloading the syllabuses. They were overloading the students and I felt very unhappy about that. I found that basically the whole area of psychology of learning is so ill-formed, that my views on this could just be disregarded... I mean the mode of argument is very simple. Nobody knows anything about it, therefore you don't. Therefore we don't take any notice of what you say. The notion that if there was something that nobody knew anything about, that perhaps some day somebody would notice something about it, was actually absent from them it was very, very odd. At least perhaps they think; 'Well, if anybody is going to notice anything about, it won't be anyone I know', or something like that. Which is rather reminiscent of William Reich's book, what's it called.... 'This Little Man'. I mean, Reich is very indignant in that, but you can see that he had gone through a lot of that stuff.

② Solving

But... the result was that I was very, very uncomfortable, and also I was under a continual barrage because I held a named position as Professor of Engineering Mechanics. And it was therefore expected that I... Basically that's a name you know - Engineering Mechanics. Just a name for a position. But people were arguing; 'Well, since you are Professor of Engineering Mechanics, you have...' Whereas they would think they knew what Engineering Mechanics was, very few of them are at all versed in Mechanics. They know the Mechanics they learned, which is actually first, second year level, most of them. Very few of them actually did Mechanics throughout the whole of their studies. They only knew a little, and they wanted that little reproduced in the course, much as they had it. And that in my opinion, was just what was not needed. Virtually teaching people Mechanics. But I found that I was under stress because, I could neither teach the subject as I thought it should be taught, nor could I arrange the teaching procedures as I felt they should be. And at the same time, felt under pressure to simply do what is being done in the university. And I didn't find that

③ Bringing together

I could accede to the pressure. So eventually I re-located. I was treated with reasonable sympathy most of the time. But I felt that I became fully estranged when I made it clear that I wasn't going to toe the party line. And there was a lot of ostracism, petty.. you know.... Nobody was actually standing up and slandering me, but there was a lot of implication and innuendo."

④ Synthesis

Here Mark engages in a recursive or iterative way of thinking i.e. a way of thinking which refused to accept arbitrary starting points, but one which raised questions which most other people would take for granted, or not even consider at all. (Reference chapter 5. p163) Mark appreciated the "knock-on" consequences of his colleagues

teaching their students by a similar process to which they had been taught. His analysis of the teaching situation at the Open University was very penetrating, and took into account a much wider range of considerations than most people would have come up with. (Reference chapter 5. p166)

Mark had already engaged in investigative reasoning before he was asked about his job. (Reference chapter 4. p117), because he could bring a variety of considerations to bear upon the problem. (Reference chapter 4. p92).

(b) Pedestrian

- (1) Breaking down
- (2) Solving
- (3) Bringing together
- (4) Synthesis

Categories (1), (2), (3) and (4) clearly identifiable.

Bill

Poland

Interviewer "How do you see the current situation in Poland?"

"Well, I suppose that um ----- the first thing that I want to say is that I haven't been following the specifics of it very" ①

Footnote

For the first two examples, the four categories have been labelled in full, i.e. (1) Breaking down, (2) Solving, (3) Bringing together and (4) Synthesis. Hereafter, these categories will be labelled (1), (2), (3) and (4) respectively.

much. I hear snippets in the -----um----- on the radio, and I watch television and I read newspapers, but um ---- I have a sort of general model of what goes on in conflict situations of this kind. And it's to do with the way in which people frighten one another and project dire consequences, and um ---- really box one another in to such an extent that the whole situation tends to escalate and become explosive. So when I read about the situation in Poland, I don't tend to look too much or even remember too much of the specifics, I just seem to think to myself, It's the same old nonsense happening again." Um ---- I mean lots of things are at a specific level one might say, but they always seem to me to be specific incidences of these more general phenomena, you can show how um ----. I mean the appetite tends to increase as people feel they're getting more and more of their own way, they escalate the demands, so there's that sort of element in Solidarity as far as I can see. There's the usual business about what people, politicians, union leaders and so on are prepared to say in public as opposed to what they might be privately thinking, there's the business of people trying to contain the wild men of their party as it were, you know, and there are the people there, and there is always a lunatic fringe and trouble makers and so on. But, I actually see this in any sort of conflict. I could go through the same sort of scenario at the Open University and show the same sort of thing happening. Because when there is some kind of economic axe wielded at the Open University, you see the same sort of attempts to project dire consequences, to form coalitions, to look for allies, and to attempt to single out the politically weak as being the people that ought to suffer. We ought to suffer the most, and so it goes on. So in every situation you'll find that detail is different. You'll find, you know, presumably the Catholic, the Catholicism makes a difference in the Polish situation. Whereas it wouldn't make a difference in the Open University. But they'll be something similar making a difference at the Open University. So what I'm saying is that as a sort of general view that I have of what goes on in situations of this kind, and um ---- I tend just to nod my head when I read it thinking, "Well, you know, it's just another bit of this nonsense being acted out in a different sort of context."

①

②

③

④

Bill's general model of the world which he applies to situations like the Polish one, is an example of analogical reasoning. Here he is faced with the problem which he probably has not had occasion to solve before, so he mentally searches for problems which seem to bear some relevance to the problem facing him, and which he has successfully solved before. (Reference chapter 4.p107). This means that in the past he has engaged in investigative reasoning, which means that he adopts a systematic

approach (i.e. one which is orderly and tidy) in his answer. (Reference chapter 5. p140-142) this answer is thus cognitively clear, because he has struggled with the unfamiliar over a similar problem and has come up with a solution. (Reference chapter 4. p87, 89).

Bill also appreciates the "knock-on" consequences of the Polish situation and similar situations at the Open University. (Reference chapter 5.p163). He is able to "cut through" (i.e. incisive cognitive complexity. Reference chapter 4.p87), the amount of extraneous detail surrounding the Polish crisis, because he is able to recognise a general pattern of events which has happened in another situation. (i.e. he sees the wood for the trees. Reference chapter 4.p108).

Nevill

Balloons: Solar Energy

Interviewer "Do you see ballooning as a form of transport that might catch on in the future?"

"As a majority user - no, but there might be specialist adaptations that could be viable. I think just in the same way if you like, that we aren't going to see the canals as a major force in the transport of goods in this country again. Perhaps I speak too quickly there. That may be premature. But anyway lets say that in the next twenty or thirty years at any rate, nevertheless there are some particular uses like the bulk transport of china clay, or something of that kind, which are quite suited to canal traffic, but they are minority uses; and I would imagine that balloons would be in the same general bracket as that. That there might be particular uses for which balloons are a good idea, solar balloons, but not as a majority. However, we are facing the possibility that..... Well, we know for a certainty that hydro-carbon fuels won't last for ever, and the number of alternatives must be explored. And among those, whilst the most obvious of existing technologies, to replace that is, I suppose, electric railways because those..... We've got the technology already for both creating the electricity and for running the trains. All the same solar energy, solar powered vehicles are a possible runner, and so for that matter are the canals, and it maybe that barges being less

①

②

③

fuel-intensive that many forms of transport; and you could have a revival for that reason. [That's why I had reservations about that after I.....while I was in the middle of saying it." ③ ④

Although Nevill's answer is relatively short, it does show evidence that he is engaging in investigative reasoning with respect to the use of balloons and solar energy. Nevill takes the original question in its entirety, and tries to bring to bear on it a variety of alternative considerations. (Reference chapter 5.p140)

His answer also shows evidence of breadth of context and depth of nesting, with respect to the number of other things he mentions in relation to balloons, (Reference chapter 4.p79, 80), and in this sense he is struggling with the unfamiliar. (Reference chapter 4.p92, 102-104). According to my definition of cognitive complexity (Reference chapter 4.p81), all of these factors need to be present in a subject's answer if he is to be classified as cognitively complex. Nevill's answer to the question of the viability of balloons as a form of future transport, also shows evidence of clear systematic thinking, i.e. chapter 5.p141-142).

Ben

Third World

Ben does not want to talk about the political and economic situations in the Third World, but about the quality of the communication that is going on between people.

"I would talk about --- the --- quality of the communication that's going on between people that are --- the people in the North and the people in the South, and I would talk about specific ways in which that communication process was being impaired or totally perverted by traditional political and economic practices, that's what I could do. Though the most important thing is that the people in the Third World can see no way to ask the people in the developed

①

world for help in a way which makes the people in the developed world think that they are going to be appreciated. I'm not sure I can see any such way in that either-----much less can the people in the Third World see any way in which they can make people in the North feel understood and cared about, because even if they are seen as caring they can't be seen as powerful and power in that sense means, you know not political power to repress but capability, so the only option is to be the receivers fundamentally and they don't know how to initiate that, and the people in the North are almost certainly going to initiate it in a way which will screw it straight away, if they simply transfer resources, they will be seen either as be-littling or as exploitable people in the North, and if they do it by a bargaining process-----.

①

If they do it by bargaining processes the people in the North will inevitably and invariably will use their power to set up situations, and the people of the South will have been exploited one way or another you can guarantee it. So if they give they will be seen as belittling or exploitable, if they do deals they will be seen as exploiting -----in fact, the more I think about it, the more I think the people in the North are hamstrung. There's hardly anything that they can do because of their power, that won't be mistrusted, so the initiative has to come from the people in the South, and the only initiative that will do them any good is if they figure out how to make a request that is not belittling for themselves, which is neither begging or bullying, how to make a request that -----.

②

-----how to take an initiative and make a request in a way which makes the people in the North feel that their capabilities have been recognised and that they are being appreciated, and if they do that then the people in the South take that kind of initiative then they can pull it off. I don't at present see how the people in the North can take an initiative that won't be mistrusted, the only initiative they could take is one which sets out the situation which enables the people in the South to take this initiative that they have to take, that's the only one and would be a rare exercise in humanistic diplomacy, that to me is the nub of the whole thing between North and South, and if there is anything you ever discover about me from this stuff it is that I'll go for the nub. [That's what I think about it-----]. You know it poses a problem, what initiative can the people in the North take, because that's where we are, that will enable the people in the South to take the initiative that they have to take, before the conversation can go on mutually constructive terms - that's it."

③

④

Ben's answer on the Third World is a good example of true cognitive complexity (pedestrian), because the four categories are clearly identifiable and relate directly to my definition of cognitive complexity in chapter 4.p81. In category (1)

Breaking down, he shows breadth of context i.e. he brings in a number of relevant points, and in categories (2) Solving, (3) Bringing together and (4) Synthesis, there is evidence of depth of nesting where he dives into these points and discusses these in some detail. (Reference chapter 4.p79, 80). It is because he brings a variety of considerations to bear upon the problem, that his answer is incisive and cogitively clear. (Reference chapter 4.p87).

This example is not unlike Mark's answer on the situation in Poland, in that it involves a systemic approach which flows from a deeper "System of Thought". Ben's thinking is also recursive or iterative in that he refuses to accept arbitrary starting points, and like Mark's answer it comes from his conviction that all the major problems of the world stem from communicational incompetence. (Reference chapter 5.p142, 163, 167). It is an example of patient, unhurried and detailed thinking, and the pauses in the extract give an indication that Ben is thinking his way through the problem. (Reference chapter 5. p167, 155). The result is a lucid, simple and clear answer.

Joss

Third World

Joss says that there is a certain sort of way that he tries to conceive the world which doesn't give him answers, but it helps him to get answers. It's partly a strategy and partly an analysis. The two overlap completely. He is asked to outline this way of thinking, in terms of the Third World.

"Well, alright, take the Third World as an example. Um.. When we talk about first, second and third, when we carve up the world like this and categorize it, what are we referring to? What are the discriminating characteristics? They aren't biological. It's not race. It's not intelligence because people haven't been tested, though some people

would rest on race and intelligence as a way of discriminating the world like that. Um.. Are we dividing according to nations? Are there certain um...? Some nations have the quality of being third worldish and others first and second worldish. Um."

Interviewer "Is it a case of Plato's Republic all over again. The gold, silver and brass people?"

"Well, I don't think.. I mean that may provide an analogy for looking at it. People tend to talk more in terms of North - South rather than anything else. I think it's a historical problem. I don't say that just because I'm an historian. I think that what we call the Third World has emerged for reasons which can only be understood historically, and solutions to Third World problems will only be realised in a historical process which we ourselves are creating. Um. [I think that, and here I'm talking in general about strategies, about how people organise themselves what organisations amongst people are significant ones. Um.. How people organise their lives economically. How countries are dependent on one another to meet the requirements of their economic organisations, and that projected through history is the way I want to look at most of what we have been talking about. Um. I'm less qualified to talk about Poland than perhaps um..., violence or the Third World having been through them myself. I mean at a time when I wasn't thinking of first, second or third world, I was just thinking in terms of incredible poverty, and what awful poverty there was in Bolivia you know, or in Mexico, or somewhere which I've seen; but never why there is poverty. [I mean that's a very important question. Why is there a Third World? Why are there people who consume a fraction of the earth's resources and of the earth's energy than other people on the same globe do? I think it's a political problem. I don't think there's anything inherent or inescapable. I don't think that there always have to be people on the bottom of the pack. The third whatever you want to call it, bottom of the heap. Um.. It's happened for certain reasons that involve colonisation, exploitation um..., by countries in the North and the West, who for whatever reasons, have developed a momentum, an ethos in history which required them sometimes with a thought of being benevolent to treat other people that way; and these people began to resent that I suppose. And there were nationalist movements in the countries which you now call the Third World, freed themselves from the sometimes, intended benevolence leadership of countries we now call the first world, and now these countries are having to fend for themselves. Sometimes they do it very well because they still have things that countries who totally dominated them need, even as independent Nation-States, and sometimes they're doing very poorly because they have nothing to sell, but tourism or their people into slavery.] But I'm talking in economic terms now, and I'm not qualified to come up with facts and figures, but I do want to see the problems as a historic one and an economic one. How do we distribute the goods and services that are available?"

Here is another example of systematic thinking where Joss wants to see the problem of the Third World in a certain way - as a historical and economical problem. (Reference chapter 5.p141-142). This is probably because he is a historian, and is essentially a so-called "one-subject man", i.e. he can probably exhibit great cognitive complexity in the field of history, but little cognitive complexity in other fields. (Reference chapter 4.p112-113). However, Joss' answer is incisive and cognitively clear. He does "attempt" to solve the problem because he goes through various stages of investigative reasoning, which means that the four categories (1) Breaking down, (2) Solving, (3) Bringing together and (4) Synthesis are clearly identifiable. (Reference chapter 4.p87, 89, 117).

Adrian

Hunger Strikers

Interviewer "You wouldn't say they are prisoners of conscience?"

"No, no, no, I certainly wouldn't I would say they were nationalist fanatics. I think they are being immensely violent to themselves. I think they are doing the most unnatural act. I'm sure that their act is um.... is and should be condemned by the Catholic Church. The Catholic Church is being ----- sleepy in its way, because Catholics do not approve of suicide, and these people are killing themselves. And what the hell the Catholic Church means by condoning it, because by and large it seems to be condoning it. And after all these people are meant to be Catholics, they have a right to live, and they should allow themselves a right to live. [I think it's a most disgusting form of political um....expression. I dislike the hunger strike. I dislike intensely the organisers of it. I disliked Ghandi pretty much, but I still think that the Ghandi approach to political change is preferable, to a hunger strike approach to political change. So I would have massive civil disobedience if I were trying to effect a change. That does not mean to say that if I were a cool and quiet political assessor, that I would assess this as a non-effective mechanism. I think it is a very inhuman mechanism. I think it might be quite fun if I was a Machiavelli to um..., start pouring gasolene or petrol over

①

②

individuals and saying, 'We'll set one of our friends alight every day, until you change in public at a specified time. Come and watch!' Since I would hate to be the person who is being burned it seems a disgusting behaviour, because these guys are essentially being set alight very, very gradually. They're being burnt to death, but they are being burnt to death by starvation. I think it's about the most inhuman piece of political struggle that I have seen, and I wouldn't particularly trust the powers behind the powers. I can see these guys, these guys could be pawns, the Bobby Sands of this world. Yes, they are..... They believe in it. I don't deny that. When you say, 'Are they prisoners of conscience?' I call them fanatics. They have imprisoned themselves in their own conscience. They have a great deal more courage than I have, to have an amazing will, totally amazing and impressive. It's a very impressive achievement. Would I give them political status? No, I would not. Absolutely not. Why not?.... I'm so unpolitical. I mean, it's hard for me to know whom I dislike more.. Whether I dislike the Protestants in the North, or the Catholics, and if it's hard for me to know whom I dislike more. It's harder. Certainly, I don't like the Protestants. Don't start getting me wrong and think I like them. I don't like the Catholics and I don't like the Protestants, and I don't dislike either, you know. They're just human beings who seem to me to be behaving extremely cruelly to each other, extremely violently to each other, extremely inhumanely. I do believe that the Protestant majority in Northern Ireland have been mistreating the Catholic minority. I recall, (and since it's come into my head I will tell you), I recall when like the Moroccans or the Algerians, let's say the Algerians; Algerie Francaise. I mean, Algeria was metropolitan France, then Algeria became independent. I remember vividly the image of this Frenchman who was a baker, who baked bread, who was born in Algeria. Whose family had lived there for hundreds of years. He was white of course, because he was French as opposed to Algerian. Just the village baker who baked a good bun. Anyway, when freedom came, the Algerian nationalists put him into his own oven and baked him."

Interviewer "Really!"

Note Cognitive Complexity (1),(2),(3), & (4) coming from the Synthesis (4)

"Um..... I can't quite see why. I mean, the guy was born there, and he made an honest living as anybody. Just made bread. The Algerians bought it, whether they were black or white or green. He was just a baker, but somehow... Anyway, you can see where that.... I mean in that case we've got a while so called minority ruling a black, (in this case Algeria, so it's not black it's Arab), white minority and a black... I mean, human beings can be amazingly cruel to each other. I am saying, and if I were pushed into a corner, I would No, I don't think I could easily be pushed into a corner. I was going to say that if I was pushed into a corner, I think I am pretty

prejudiced against the Northern Ireland Protestants, being partly Scottish myself. I think they can be a pretty bleak and dour, and unforgiving lot, and very upright. The Catholics remind me more of the Malaysians, a pretty useless lot -- ----- Drinking themselves to death and do ---- --. [So given those two sets of prejudices, (Laughter), I would have thought that unprejudiced man has done.. I would have thought that probably the Catholics were in the right, in the same way that um.... But I mean, what a pathetic thing to fight over, Catholic versus Protestant. It's probably not actually. It's probably a racist conflict. It's probably some kind of a Celt versus some different kind of a Celt."

③

④

Adrian gives a very emotional answer on the hunger strikers in the Maze prison. In fact, his cognitive complexity is controlled by his emotions, and at times he comes across as being very angry and annoyed with himself and the situation. (Reference chapter 5.p164). He also has an abiding concern with corrigibility, in that at different stages in his reasoning, he seems to be mentally on the alert for possible mistakes in his reasoning. (Reference chapter 5.p167).

The extract is also a good example of chain cognitive complexity. In the first part of his answer, he shows evidence of breadth of context and depth of nesting, and brings a variety of considerations to bear upon the problem. (Reference chapter 4.p79, 80, 83, 84). There is also evidence that he struggles with the unfamiliar and engages in investigative reasoning, in the first three sections of his answer (i.e. (1) Breaking down, (2) Solving and, (3) Bringing together), but by the time he gets to the end of his answer (i.e. (4) Synthesis), he starts to tell a story about an Algerian baker. (Reference chapter 4. p102, 117). This story which Adrian tells by way of an example to illustrate his conclusion (i.e. (4) Synthesis), can also be coded (1) Breaking down, (2) Solving, (3) Bringing together and (4) Synthesis - thus the two examples form a cognitive complexity chain. This is a very effective and creative piece of true cognitive complexity. (Reference chapter 4.p106, 107).

Bill

Advice to Someone Getting Married

"A recipe for getting married. Well, the reason that I wouldn't want to loom into that advice giving game there, is that I think a lot of the major problems to do with getting married these days are actually sex problems. And on the whole, if there are for example, problems between husbands and wives, it may be that they're sexually incompatible in some way; but they actually aren't going to tell you that. They're going to tell you about the fact that the husband never pays any attention, or pushes off to the pub, or does this, that, or the other. And um... My own private view about the matter is, that there are at least four kinds of male and four kind of female. And the kinds of relationships that they will tend to form will depend..., and the likelihood of them surviving will depend on the kind of person they are. I could give you some pretty strong predictions about the likelihood of a handsome film star marrying a very attractive girl and um... you know the chances of that surviving are about one in a hundred I should think, but um.... It seems to me that at the male level there's what I would call the dead normal, no gender conflict male. Then there are a couple of kinds of male who do have internal gender conflicts, and these are roughly the skinhead types - the hippy type. The skinhead type is basically a person who is really trying to prove again and again that he is a full blooded male, either by racing cars, or climbing mountains or something of the sort. Um..... Or someone like Bertrand Russell riding roughshod over a paper and pencil environment. Riding roughshod over that particular environment, and that you know, that creates enormous problems, because in the very act of trying to prove that you're a man by climbing mountains, you automatically join what's virtually a homosexual group; because it's just all other men climbing mountains with you. So there are endless problems about this. Then there's the hippy type, which is the kind of person that resolves a gender conflict by moving in a more feminine direction. Um.... you know sort of long hair and picking things like interior decorating or whatever. You know, the basically, the effeminate male rather than the masculine male. And the fourth kind that Kinsey never mentioned, which is what I call the invert. And that's the person, that's the situation, that refers to the kind of person who is anatomically a male, but feels like a perfectly sanguine, you know sort of no-conflict female. You know, you get that sort of situation where you have a husband and wife who are perfectly happy, but the wife wears the trousers and the husband potters around doing

①

the domestic chores. It's really a sort of role reversal, but there's no hassle about it. You know, it's not even a point of comment. They're both happy about that. Now it seems to me that those are minimum sorts of categories. They have their analogies in females as well. You have the perfectly ordinary no gender conflict female, and you have the somewhat, or highly masculine female, or the highly effeminate female, or the, you know, like Marilyn Monroe, or someone like that, a sort of sugary sweet kind; who are actually anything but sugary sweet when you get to know them."

①

Interviewer

"Like Diana Dors -----"

"And you have the invert again. And it seems to me that the kinds of relationships that these people form will very much depend on the type of person they are, and I don't actually see how someone from the outside without a lot of inside knowledge of the psychological logistics and dynamics of this situation can actually offer advice. You can certainly make suggestions about the sort of pairs that will go together, and you can often sense that um.... a couple of people are basically not suited, because they don't actually complement one another in the right sort of

way. Um.... but um.. [I mean if you ask me for a recipe, I think it would certainly be possible to do a very very much better job than computer dating, or any outfits like that do; because that is just very trivial and superficial. And I think a lot could be done to identify the kind of, the kinds of proclivities and interests and so on that people have; and the sort of conflicts they have inside them. I think a lot could be done to identify those and come up with more accurate recommendations about the kind of person that one should marry. But the trouble is that people often don't want to recognise that in themselves you see. If a male is somewhat effeminate, it's the last thing he's prepared to admit very often. I mean, I always wanted to be a girl. I would have made a beautiful girl. (Laughter) But um... Really there aren't many people who are willing actually to confront these sort of problems in themselves. Um... but it is actually quite interesting because it's really the ones with gender conflict that actually have something to prove. Um to actually prove that they're male or to prove that they're not male or whatever, or female or not female. And of course, it's the ones that have something to prove that um... are actually at the leading edge in my opinion, of social evolution. They're the people who are actually trying to achieve and do things in the world. So um... It comes as no surprise again if you actually look at the biographies of great achievers, to find that there are all sorts of funny things about their sex lives and their inter-personal relationships. And one would expect that because um... Well, one would expect it with respect to um a model of that kind, but it's actually very difficult to

②

get into that. [Certainly I wouldn't be happy about giving matrimonial guidance because..... That wasn't the question you asked. You actually asked about people

③

getting married. I wouldn't be happy about giving matrimonial guidance because in the first place one can't know about these sorts of difficulties, and um.. I don't think the people themselves know actually. I think what tends to happen is that people are aware that they're frustrated and angry, or whatever. They know what sorts of emotions they have all right, but they don't actually know why they have got them. Um... And it's not a question of people getting sort of married. The best advice that you could offer would be before that announcement was made in the form of some kind of guidance or self-insight, that would head them in the direction of finding someone that they were going to be compatible with, even if um... it wasn't the sort of person that perhaps suited their vanity. I suppose there must be lots of men who would like a really beautiful looking doll on their arms. (Laughter) That's probably the most disastrous sort of thing that could happen to some men and um.., to actually make them see that might be well worthwhile. The same ---- presumably there are women who want a prince charming, but um... [I think the real difficulties about giving advice at that level. Though one can certainly give advice about things like wedding arrangements, and how to organise the cake and how to buy a house.]

③

④

Although this example does look like a sustained display of true cognitive complexity, Bill has already thought about the advice he would give to someone getting married. He came up with a whole variety of impressive-looking considerations which he brings to bear on the issue of marriage, in order to demonstrate the validity of his own preferred viewpoint. Here Bill is proudly exhibiting his solution to the problem that is already familiar to him, and for which he has already worked out a form of solution that satisfies him. (Reference chapter 5.p142, 143). He gives a fluent summary of Kinsey's ideas which he expounds in a cognitively clear way from memory. So Bill's ideas are in fact secondhand. (Reference chapter 5.p145). Nevertheless, Bill's answer is a good example of systematic thinking, because it is logical and tidy, and he is also mentally on the alert for possible mistakes in his reasoning, i.e. he is concerned with corrigibility. (Reference chapter 5.p141, 167).

2. Disjunctive Cognitive Complexity

(a) End Categories Combined

(1) Breaking down

- (2) Solving
- (3) Bringing together)
- (4) Synthesis) Combined

Only Categories (1) and (2) clearly identifiable

Bertram

Poland

Interviewer "Have you got any first hand information about the situation in Poland? For example, do you know any Polish people?"

"I do have some trivial information when I was driving between Oxford and Birmingham this year. I gave a lift to a couple of Polish students, and had a long conversation with them. I also have first hand information of a slightly different sort, in that for a long time I was very close friends with a family in Czechoslovakia; and it's so... I think the situation in Prague in 1967-68 and in Poland at the moment is sufficiently close. I think the experiences are sufficiently similar to say that I have a kind of though still vicarious, I have some sort of first hand knowledge of what it is like to be an ordinary family. That's an ordinary family living under a people's democracy. But that's all."

①
②
③+④

Bertram has some appreciation of the situation in Poland (i.e. breadth of context), but he never actually expands these ideas and discusses them in a cognitively complex way. (ie. no depth of nesting). And so his answer comes to an abrupt end. In any case, his information is secondhand (Reference chapter 5.p145, 148-149), and has been obtained from Polish students and friends.

Bill

Hobbies

Interviewer "You haven't got any physical activities that you indulge in?"

"I'm bone idle physically, Um... I've never engaged in any um.. I've never engaged in any sports. I've never actually had any team spirit. The day I left school I walked around saying 'Goodbye' to the teachers, and when I came to the Sports master he said, 'I don't think I know you.' I had to say, 'Yes, we haven't met very often'. (Laughter) Um... I um... have never been interested in sports. I was forced to engage in certain kinds of athletic activity when I was in the R.A.F. and did my national service, I couldn't get out of it then, but um.... I've never actually engaged in anything terribly energetic. In fact, I don't even play chess except with very light pieces. (Laughter) Um.... when I broke my legs I was advised to do lots of exercise, and I'm afraid I didn't do the exercises. [But as it happens the exercises don't make any difference, because in spite of what physiotherapists say, the exercises basically only speed up something, only speed up recovery. They don't make any difference between recovery and non-recovery! So the fact that I now walk a bit like Donald Duck is really nothing to do with my laziness. It's just that my legs were broken and wrongly set." (Laughter)

①

②

③+④

Here Bill has not formulated an answer in advance about any physical activities which he engages in, in his spare time. He has a mental catalogue of seemingly relevant talking-points which he never develops in an answer to the question. (Reference chapter 1.p3). The result is that he digresses in his thinking and ends his answer on a cynical note.

Lance

Advice to Someone Getting Married

Interviewer "What are your recipes for marriage? You're not married yourself are you?"

"No. Well, first of all, what I would say myself regarding marriage, it's a very good point. Is this. I would say to the young people, and that's who matters more than anything, they're the future whether I like it or not. I must now recede to the background and I say to them, 'You have no future', and I say that with a capital N. You have no future in this present political system, and the sooner you either kick it in, change it, the sooner you get on with it. Now that is, they are to take this authority on now - a major task. Another one, the preservation of the human race. To get rid of the nuclear stuff. That's the main problem there. And then regarding marriage. Well, to have marriage you need a house, you need a home, you need a job - right? So therefore, if they are contemplating marriage the first thing they've got to do really, they've got to sort this out politically and economically, in order to have a chance to have a successful marriage. Because with that, if you can take a wife and have children, you want a home for them. You want money coming in. You want a job. But um... I personally myself think marriage is probably an over-rated thing. I don't know."

Lance has mustered up a few talking-points about marriage, but he has not thought about them in any logical and intelligent way, and so they come across as being confused and muddled. It is a good example of the kind of muddleheaded cognitive complexity that leads in the direction of confusion. Lance is being cognitively complex in a floundering sort of way. (Reference chapter 4.p87.)

(b) Middle Categories Combined

- (1) Breaking down
- (2) Solving) Combined
- (3) Bringing together)
- (4) Synthesis

Only Categories (1) and (4) clearly identifiable.

Ben

Balloons: Solar Energy

Interviewer "Do you see ballooning as a form of transport?"

<p>"No, I didn't say that. Um..... If I weigh it up against planes, balloons lack speed and carrying capacity; if I weigh them up against trains, for carrying capacity and for speed, they might be comparable for speed, but certainly not for carrying capacity um.....if I weighed them up against barges on canals, they again lose out on carrying capacity, not on speed but on carrying capacity. I think its just possible that canal barges might become important again, but at the moment I have to admit that I see the canals mainly as a pleasure thing, and that I see balloons mainly as people carriers and certainly as not very efficient people carriers better for pleasure. I mean a train can go in all weather and will have roughly the same speed."</p>	<div style="border-left: 1px solid black; border-top: 1px solid black; border-bottom: 1px solid black; padding-left: 5px;">①</div> <div style="border-left: 1px solid black; border-top: 1px solid black; border-bottom: 1px solid black; padding-left: 5px;">②+③</div> <div style="border-left: 1px solid black; border-top: 1px solid black; border-bottom: 1px solid black; padding-left: 5px;">④</div>
--	--

Ben does start to engage in investigative reasoning in this example, in that he starts to search for relevant-looking considerations to formulate an answer. But he never discusses these considerations in any detail (i.e. no breadth of context in Category (1) Breaking down), or in any depth (i.e. no depth of nesting in Categories (2) Solving and (3) Bringing together), so his answer ends up rather like a shopping list. Ben's answer displays a kind of evaluative cognitive complexity.

(c) Beginning Categories Combined

- | | |
|--|--|
| <p>(1) Breaking down)
(2) Solving)
(3) Bringing together
(4) Synthesis</p> | <p style="text-align: center;"><u>Combined</u></p> |
|--|--|

Only Categories (3) and (4) clearly identifiable.

Ben

Violence on TV

Ben talking about his three year old daughter watching a TV programme called "Blake's Seven".

"What I would rather do would be to just make it clear to her that it is in her power to switch that stuff off, most of it is just fantasy, make believe, on the other hand, I don't want to protect her from it, what I want to do is vaccinate her against it, and this is the only way I can see to do it, it's there, it's in real life as well and very many times, not always, but very many times if you can just go calm in a violent situation then you yourself might help to cool it, and so I don't think that I'm doing an unfortunate thing by teaching her that she can switch if off, because in the end, I reckon that if you're in a violent situation yourself the only way that you can get out of it, if you are not possessed of massive physical strength is if you actually somehow change your perceptions of the situation so that you can give a response that you wouldn't have given otherwise and that might influence it, it's dicey and it's dodgy and it might not work, but I see no other way and I don't think that teaching her to switch off the set actually is in opposition to that, I think it's in some harmony and in parallel with it. So in that respect it's no problem, I don't treat it as a subject in itself, all I do is try to be absolutely certain that the channels of communication between me and her watching the set are fully open so that she and I together, or eventually she by herself, can respond to the situation as her feelings indicate are healthy."

①+②

③

④

Here Ben is creating a way in which he can indirectly control what programmes his young daughter watches on television. He is trying to avoid being authoritarian by telling her to switch off, what he sees, as unsuitable programmes, whilst at the same time not adopting a liberal approach and letting her watch anything that she chooses. Ben's creative approach (Reference chapter 4.p106, chapter 5.p154), means that he displays little evidence of breadth of context and depth of nesting in his answer (which is novel compared to the other subjects), which means that he is not truly cognitively complex with respect to Categories (1) Breaking down and (2) Solving.

3. Borderline Cognitive Complexity

(a) Last three Categories Combined

- | | | |
|-----|-------------------|---|
| (1) | Breaking down | |
| (2) | Solving |) |
| (3) | Bringing together |) |
| (4) | Synthesis |) |
- Combined

Only Category (1) is clearly identifiable.

Bertram

Poland

Interviewer "Do you see that the situation in Poland at the moment, has dramatically improved from a few weeks ago?"

"No. I don't think objectively that it has improved. When I said that I didn't understand exactly what you meant by, 'How do I see the situation in Poland?' is this, that I could imagine a number of different ways of answering your question. I mean, one could say, 'Well, I see the situation in Poland as pre-revolutionary. You know, one expects some kind of over-throw of the Polish state. That would be one way of saying that I see it by looking forward to some situation. Right. Another way of answering your question of, 'How do I see it?' is to say, 'Well, I see it as a culmination of historical tendencies, and these sort of historical tendencies. Nationalism, Catholicism, the inability of the Communist party in the past to impose a moral authority on the Polish people? And it seems to me that there are two entirely different kinds of ways of answering the question, 'How do I see it?' So I suppose I see it in both ways really. Both as a culmination of historical tendencies, and as a preliminary to some major alteration in the relationship between the state and civil society in Poland."

①

②+③+④

Bertram's answer on the situation in Poland displays a good example of Category (1) Breaking down, because it shows breadth of context. (Reference chapter 4.p79). As there is no depth of nesting (Reference chapter 4.p80) in the answer, it cannot be called cognitively complex. However, Bertram does bring a variety of considerations to bear upon the problem (Reference chapter 4.p83-84), but does not investigate them in any depth. (i.e. no investigative reasoning, hence Categories (2) Solving, (3) Bringing together and (4) Synthesis are combined.)

Arthur

Hobbies

Interviewer "Have you got any hobbies, or pastimes, or things that you do when you are not at the Open University? Things that really touch you and turn you on?"

"Um.... a lot of them neglected and you know, retirement is a time when a lot of them might come up again. But um.... Yes, I walk a lot. I've never been a rock climber, but I do like to go walking, and I'm still very active in that. I fish a bit you know. I've fished from boyhood and still do so occasionally. Um. I have been a..... take a fair amount of sport. Sort of active team games and so on have long since gone, but I walk and swim and so on. I was a moderate player of the violin, and might come back to that. I used to paint quite a lot when I was in a routine job. I might come back down to that also. So yes, I've got a lot of things to turn to um....., and you know, I don't think I'm ever bored in such leisure time that has come to me since I became an academic, and I don't expect to be bored in retirement."

①

②+③+④

Here Arthur starts to break down (i.e. Category (1)) the problem into parts and to investigate them to some extent. (i.e. breadth of context.) But when he does, he seems ridden with doubts and misgivings about which hobbies he might take up again in retirement. He seems too hesitant to discuss them in any depth (i.e. Categories (2) Solving, (3) Bringing together and (4) Synthesis are combined), with the result that his

answer has a dithering feel about it. (Reference chapter 1.p3.)

(b) First Three Categories combined

- | | | |
|-----------------------|---|-----------------|
| (1) Breaking down |) | |
| (2) Solving |) | <u>Combined</u> |
| (3) Bringing together |) | |
| (4) Synthesis | | |

Only Category (4) is clearly identifiable.

Robert

My Job

Interviewer "Can you outline a little bit of what you think your job at the Open University entails?"

"I think I want to say are general things to begin with. I think that the purpose of teaching..... I'm not sure what teaching means. I really don't know how you teach things and I don't know how people learn things. I don't think that very many people do, and I think that characters or institutes, or institutions that try to quantify this in some way, are just talking a lot of nonsense; because people don't really know what these terms mean. So I use them very carefully, but I think that probably what I am trying to do when teaching History is in a sense teaching people how to read; and that's all. Um.... Okay, so that's the very general thing. Specifically about the Open University, alright, I write units, I help administer courses, I sit on exam boards. Um..... I head a research group. I am involved in making proposals for new courses. An important part of the idea in fact, is thinking up new ideas of how we might do this that or the other thing. I teach at summer schools, I do a great number of day schools, partly in order to give them the benefit of my presence, and partly to just find out what's in fact going on with courses, because not enough central academics know very much about how the courses they produce actually get taught. I do a very considerable amount of research, both within the

①+②+③

context of this research group that I am heading, and outside it, and I consider that also as part of my O.U. work, because I think that it's important that the various disciplines, in my case the History discipline, develop for itself a profile, a research profile; which is recognised outside the university. So they say; 'Ah, History at the O.U., they're doing X.Y.Z,' and maybe make a name for ourselves. Being able to comment upon the work of colleagues, particular things which other people write for courses, with which I am associated. Pulling my weight as far as I can, with the various administrative tasks I'm given within the faculty and outside of it. I think that's roughly what it is. I can't remember precisely terms and conditions, but I think that is about as close as you'd get.'

①+②+③

④

Here Robert starts to break down into different areas exactly what he thinks his job involves at the Open University. (i.e. evidence of breadth of context.) However, he does not go on to discuss each facet of his job in any detail or in any depth (i.e. no evidence of depth of nesting), the result being that the points which he does make become part of a shopping list, and very little cognitive complexity is displayed. (i.e. Categories (1) Breaking down, (2) Solving and (3) Bringing together are combined.)

4. No Cognitive Complexity

All Four Categories Combined

- | | | |
|-----------------------|---|-----------------|
| (1) Breaking down |) | |
| |) | |
| (2) Solving |) | |
| |) | |
| (3) Bringing together |) | <u>Combined</u> |
| |) | |
| (4) Synthesis |) | |

No Category clearly identifiable

Robert

Violence on TV

Interviewer "Have you any views Robert about violence in television programmes?"

"I don't have a television and couldn't care less."

Interviewer "You don't watch television at all?"

"No."

Interviewer "Do you go to films at all at the cinema?"

"I used to before our daughter was born, but since she has been born I haven't had a chance."

Interviewer "At that particular time did you feel that films were violent?"

"Not the ones that I went to see particularly."

Interviewer "I mean you don't watch television at all?"

"I don't have a television to watch."

Interviewer "Oh, I see, so you are not aware of the programmes that are on? I mean, would you say for example that sports like karate or boxing are tantamount to fringe violence?"

"It's not something I particularly think about. I guess I would rather have them punching each other in a ring than starting wars. But that's the way I feel about Germans driving on an autobahn. I mean....."

Interviewer "You've not actually thought about that question at all."

"No. It doesn't bother me....really."

①+②+③+④

In this example, Robert's very short and sharp answers show that he is not the slightest bit interested in discussing violence on television. Hence no cognitive complexity is displayed (i.e. Categories (1) Breaking down, (2) Solving, (3) Bringing together and (4) Synthesis are combined), and Robert comes across as being cognitively arrogant.

John

Hunger Strikers

Interviewer "Fairly recently, I think it was over the weekend, a hunger strike came to an end in the Maze prison. Up until the time it was called off, would you have said that these prisoners should have been given political status?"

"Well, I'm clearly not going to answer that question. You'll expect from what I've said before, um..... I would answer it only indirectly in terms of what I..., what I think the government ought to have done; given my interpretation of what they are seeking. That to me consists of my putting myself in the government's shoes, assessing the different um.... outcomes they're seeking, in terms of what is likely to happen if they do this or don't do that. What are the political consequences? And in a word seeking what was the rational strategy for them. In other words, I suppose you know..... It is quite interesting why I don't offer an answer. It is that I think I don't offer an answer except in a decision situation. In other words, I have a lot of... on a lot of these issues I have a lot, far too much actually, information floating around in my mind. Um..... But it's never , it takes I think a probabalistic form, even on the value side, you know. I may.... I'm not certain about my preferences or my values always, so until I would actually have to take a decision which is of real consequence to me, I don't necessarily have a position. And um..... I only realised what my position was after, having being committed to it by a decision. And the decision would be I suppose, to be put on the spot about what my view is, and in circumstances other than this sort of one. I may not be able to um..... be as evasive as I am here. Although this would be my better, more correct report, then if I was suddenly confronted on television; with a necessity to give an answer to that particular question."

① + ② + ③ + ④

John refuses to give an answer on the hunger strikers, because he maintains that he has "far too much..... information floating around in his (my) head." In this respect he is complicating the situation, by trying to marshal a whole variety of considerations to cope with the problem. (Reference chapter 4.p87.) He is displaying a wariness and a defensiveness which is quite unwarranted in this interview situation. (Reference chapter4.p112.) What is actually called for is a straightforward approach to formulate a solution to the problem, if he has not already thought about the topic before

and worked out an answer which is acceptable to him. John's complex justification of why he does not answer the question, means that he is unable to display any true cognitive complexity.

Bertram

Advice to Someone Getting Married

Interviewer "Right Bertram, have you got any advice for someone getting married?"

"No. None whatsoever."

Interviewer "Would you give any advice?"

"Not in the abstract. No."

Interviewer "I mean, you do advocate people getting married as opposed to living together?"

"No. I don't have any feelings one way or another."

Interviewer "It doesn't particularly matter. You've not actually thought about it or considered it?"

No."

① + ② + ③ + ④

Bertram's answer shows that he has no shred of interest in the topic of marriage, and so does not offer any answer at all. (i.e. Categories (1) Breaking down, (2) Solving, (3) Bringing together and (4) Synthesis are combined). The extract is a very good example of no cognitive complexity.

5. Secondhand Cognitive Complexity

Evidence of memorised facts and regurgitated arguments and ideas

Categories (1) Breaking down, (2) Solving, (3) Bringing together and (4) Synthesis are not identified, as this is the subject of another thesis. Three extracts are included in this analysis for the sake of completeness.

Arthur

Third World

Arthur talking about local tribal groups in India.

Interviewer "Does a similar situation exist in Africa?"

"I don't really know um.... You know, I've stepped foot on the African continent but don't really know it. I know something about Africa because geographers of my generation knew something about most places. I can't really pretend to be anything like up to date, but I would guess that there is something in common. I think there are common elements across the Third World, and I would guess that, 'Yes', something like that, is the unsolved problem, and it is the problem in part of sort of internal colonialism if you like. Where under whatever political regime, the cities and the most developed parts really act like colonial powers in relation to the less developed parts. You know I recall my daughter coming back, my older daughter coming back from two years V.S.O. work in Nigeria, and saying, 'What a shower of racist bastards they are out there'."

A good example of secondhand cognitive complexity, which shows that Arthur's knowledge about Africa comes from his academic study of it as a geographer, and from remarks made by his daughter who has visited the country. (Reference chapter 5.p148-149).

Derrick

Hunger Strikers

Derrick gives an example of Wolf Tone, an eighteenth-century Irishman, in answer to the question of whether the hunger strikers in the Maze prison in Belfast should be given political status.

Interviewer "Wolf Tone. Is that two names?"

"Yes, it's his name, his full name. During the Napoleonic Wars, he founded a society called the United Irishmen, directed against British rule in Ireland, and which favoured home rule for Ireland. At that stage Ireland had only recently ceased to have a separate parliament in Dublin, had this parliament emerged by an act of union, but the parliament which did that, the original Irish parliament, was very unrepresentative by our standards; very much was the parliament of the Protestants. To start with Catholics were forbidden to hold seats in parliament, because they couldn't take the oath of loyalty. Only members of the Protestant Churches could take the oath of loyalty to the English king, and so consequently it was predominantly a Protestant Landowner Parliament, and of course the vote, as in this country, was restricted on a property franchise. It was not an open vote for everybody. It was limited to males who were over twenty-one years old, and held the appropriate amount of property. So that it was resented by many Irishmen when the parliaments merged. Wolf Tone was in fact himself a Protestant, but he formed a separate Irish organisation the United Irishmen which was sympathetic, not to Catholicism, but to the French revolution; and this was in the 1790's. So obviously it put him at immediate loggerheads with the British Government, which was at war with France - Revolutionary France. The British in fact suppressed it, and after the Napoleonic Wars, the British reorganised the Irish police system to create a unified system of a single para-military police force. I mean this is again something which is often forgotten, when you talk about Ireland, and that is that they have never had an unarmed civilian police force in Ireland; except the Dublin Metropolitan Police. The police force in Ireland, the old Royal Irish Constabulary, were an armed force. They didn't simply carry guns as an American police man did. They lived in barracks scattered about the countryside. They operated as a para-military and not as a civilian police force. This is the great difference that is often missed because during the late part of the nineteenth-century they wore very similar uniforms to English police, but they differed in that every Irish policeman had a rifle and bayonet. Places like police

stations were equipped with small pieces of artillery and later on machine guns. They were designed to hold down an occupied population, and consequently towards the end of the nineteenth-century at the beginning of the First World War, the para-military organisations grew in Ireland, and there's now two separate ones; the Ulster Volunteers, who are largely Protestant and Loyalist, and the Irish volunteers, who are largely Catholic and Republican. They openly paraded with fire arms before the First World War, so the tradition of armed force in Irish politics runs much deeper than most English people realise. The enormous tradition of uprisings certainly the famine of the 1840's through to the turn of the century, there were incoherent uprisings in Ireland. The peasants, which the Royal Irish Constabulary as it then was, was forced specifically to repress, it was not formed to hand out parking tickets or um..catch burglars, primarily it was formed to repress. Before becoming the Irish Constabulary, it's original title was, 'The Law and Order Corps' or 'The Peace Keeping Corps', and it was designed as a mobile para-military force; which the authorities could call in when the local population got out of hand. And this is the function they've had for many many years....."

Lance

My Job

Lance talking about his leather crafts.

"Yes, well what has actually happened you see, I have got two leather crafts and they're distinct as chalk and cheese. Though they are in leather they're two separate crafts. One is a modern craft if you like, in that I make these handbags, belts and all that. You could call that a bread and butter craft. And then I have my ancient craft of mediaeval leather vessels. Now to get the record straight, and so we'll put it straight. We'll put it like this. What do you mean by 'Bombard'? What do you mean by mediaeval leather vessels? What do you mean by 'Bombard' and 'Black-jack'? Now we'll put it to you very quickly. We had the Norman conquest, and on their horses they had skins with water and wine. A hundred years after the conquest the English looked at this and said, 'We can do better, why don't we drink out of leather?' So they learnt a process of hardening that leather to make it really solidly hard which is a mediaval secret kept from father to son of the guilds, and then they founded a form of lacquer that would seal it; and now hence therefore was to develop an elite piece of culture in the history of the world. Never

before or since man in my country was going to drink predominantly from leather. You'd be surprised how few Englishmen know that part of their history. And when William Shakespeare was around in his plays, he was writing about every day events, which a lot of us have read, are hidden the following words: 'Bombard', 'Black-jack', 'Costell'. Shakespeare himself was drinking from a Black-jack. That was a common leather vessel. Now they were still drinking out of leather until about 1700, 1750. One might therefore, ask what put an end to it. It was only to the domination of pewter. And it wasn't made again until the advent of my life. The complete mastery of this craft again. It's taken me nineteen years, and my God I've had to pay a price to learn it. So here is this craft all intact again on Bodmin Moors. So I cannot put that strong enough to you. So people you know, to put it to you, this is what has actually taken place, and what will happen to the craft in the event of my death I don't know. It depends from now on how society reacts towards me. I don't think I am a selfish person. I've never wanted to adhere to that type of thing. I'd love to pass it on and give it to people. And um therefore I've got my two crafts you see. My ancient craft, the ancient mediaeval craft and my other craft. So that's....."

These two examples contain evidence of Derrick's and Lance's reading of history books, and the ideas expressed are largely secondhand. (Reference chapter 5.p145, 148-149.) Derrick complicates his answer on the hunger strikers by bringing in every possible fact he can remember about the history of Ireland (Reference chapter 4.p87, chapter 5.p136, 142-143), and Lance waffles his way through a convoluted account of the history of the Bombard and Blackjack, which he has gleaned from textbooks.

Problems with the Analysis

There were three problems with the main analysis. These were:

1. The Tip-of-the-Iceberg Phenomenon

As I was analysing the transcripts with respect to the category combinations and types of cognitive complexity displayed, I noticed several occasions where a subject's

thoughts came to the surface momentarily only to disappear again. This phenomenon arose on the occasions when he realised that he had digressed in his thinking, or when he was attempting to formulate an answer to the question he had been asked. It was a type of investigative reasoning which I called the tip-of-the-iceberg phenomenon. An example of this phenomenon, can be found in Bill's discussion on the topic of 'advice to someone getting married'.

"Certainly I wouldn't be happy about giving matrimonial guidance because..... That wasn't the question you asked. You actually asked about people getting married. I wouldn't be happy about giving matrimonial guidance because in the first place one can't know about these sorts of difficulties, and um..... I don't think the people themselves know actually, um....."

2. "It Takes One to Know One"

A subject like Mark often came up with so many strikingly intelligent and creative ideas during the '8 Topic Interview', that it was sometimes very difficult to assess the type of cognitive complexity that he was displaying. At times he could be exceedingly subtle in his arguments, and I had to guard against dismissing his thinking as being confused. (i.e. a subtle thinker can usually be recognised and appreciated only by another thinker who is no less subtle - "it takes one to know one".) There were times when I got lost in Mark's arguments, purely because I did not have the range of concepts that was in his possession. However, these problems of interpretation were finally overcome by my re-reading particular passages in Mark's transcript about 20-30 times, and then I had a good idea about what he was actually saying - not what I thought he was saying.

3. Methods of Graphing Results

The '8 Topic Interview', like the early experiments I carried out, was not of the

conventional hypothesis - testing kind, because it was geared towards an exemplification of cognitive complexity to support my re-conceptualisation of it, which I had discussed in chapter 4. Therefore, there was no point in subjecting the interview data to any multivariate statistical procedures and correlational analyses. Instead, I collated the information about the types of cognitive complexity exhibited by the subjects into tables and a graph, and from these I could note how many constituents of cognitive complexity (like incisiveness, muddled thinking, dithering, etc.) the subjects had displayed during the interview. These findings helped to substantiate the unobtrusive observations about cognitive complexity from the early experiments discussed in chapter 5, and these findings also support the validity of the methodology proposed and adopted in chapter 6.

CHAPTER 8

CONCLUSIONS AND FURTHER DIRECTIONS

In this thesis Cognitive Complexity has been redefined as:

the name give to a mode of mental functioning that arises when an attempt is made to solve unfamiliar problems by bringing a variety of different considerations to bear upon them.

This definition carefully avoids describing cognitive complexity as being an ability, or construct, or disposition, or trait, or information-processing variable, etc. What it does say is something more straightforward. If a person is bringing a variety of considerations to bear upon problems that confront him, then that person is ipso facto functioning in a cognitively complex manner. In the very act of trying to bring a variety of different considerations to bear upon some particular problem or problems, a person by this definition goes into a cognitively complex mode of functioning. Cognitive complexity is also a pre-condition for trying to solve problems in such a way. A person who is unable to bring a variety of different considerations to bear upon a given problem is not capable of exhibiting this kind of cognitive complexity that I am talking about. Thus there is a tacit symmetry built into my definition. The lack of an ability to bring multiple considerations to bear upon a problem implies an inability to be cognitively complex with respect to that problem. And vice-versa. This is a "newsworthy" conceptual finding which has not been formulated by previous researchers.

The methodology developed for the fieldwork and the analysis was aimed at conceptual clarification of cognitive complexity. The experimental fieldwork was geared towards conceptual clarification rather than hypothesis-testing, because my primary interest was to gain insights into what cognitive complexity is and how it might best be researched. The unobtrusive observation of cognitive complexity in various naturalistic situations e.g. groups of people talking in a coffee bar, led to the development of the

in-depth interview situation (the '8 Topic Interview'), in which subjects were asked questions about different topics, and encouraged to talk about them at length and in detail with no time constraints; in order to enable cognitive complexity to be displayed.

Developing the Methodology

To build on the foundations laid in this research, the methodology needs to be developed to show the importance of cognitive complexity in the general field of psychology, with respect to how people solve problems, react and operate in everyday life. The first issue that the methodology will need to address is that of self-awareness, i.e. the extent to which people are aware of their own complex mental functioning, as a first step to being able to control their cognitive complexity. Are people aware or not of when they are being cognitively complex? It is difficult to test a person's awareness without interfering with their display of cognitive complexity. In seeking to establish how aware subjects are of their own cognitive complexity, we are asking them to engage in a form of *introspection*. Introspection was the tool of William James (1890), and went out of favour during the behaviourist dominance of psychology. In spite of the inherent difficulties as a method, it has to some extent been revived, albeit under different names with the cognitive revolution in psychology, usually dated from the work of Neisser (1967).

Awareness of mental functioning can be important for practical decisions and problem-solving, but it can also distort the pattern of mental functioning displayed. A person who is aware of complex mental functioning is able to restrict the field. The cognitively complex person who can and does see the wood for the trees, is usually positive in his approach to solving everyday problems. This positive cognitive complexity can be purely diagnostic, or diagnostic plus productive, i.e. the cognitive complexity which leads to the actual solution of problems. The person who has purely diagnostic cognitive complexity is rather like President Carter, who was reputed to

understand the complexities of world problems better, probably than most Presidents, but found great difficulty in reaching decisions.

People are aware to a greater or lesser extent of their mental functioning in various situations in everyday life. What is required is a methodology in which a person has to assess his or her own mental functioning, when faced with solving a complex problem. In this way, it is possible to distinguish between effective cognitive complexity (which is positive and purposeful), which attempts to cope with the complexities of life, and the kind of useless cognitive complexity which is compromising and negative, and only leads to comparison. For example, from the '8 Topic Interview' Mark was so subtle and cognitively complex, that it took another person who was equally subtle and cognitively complex to understand him. He was cognitively complex all of the time, and the subtlety of his complexity might lead one to ask: "Is cognitive complexity a good thing?"

In order to cope with people like Mark, the techniques need to be developed to include some introspection on the subject's part. They would be asked to assess whether they had displayed any cognitive complexity, in their answer on a particular topic. This self-assessment is the extent to which a person himself, sees himself as coming across as cognitively complex in an interview situation. A defect in this approach, is that it relies on a great deal of inner perception and honesty, on the part of the subjects. Finally, the subjects could assess their own self-assessment of a particular topic, in which they say they have displayed cognitive complexity. Here, the question arises as to what criteria they use to assess themselves. It may not be possible for the subjects to solve the problems that they are given, and attend to their cognitive complexity which is simultaneously occurring.

Chance interactional factors which occur in real-life situations need carefully relating to research methodology. For example, one of the topics in the '8 Topic Interview' was 'Advice to Someone Getting Married'. A subject who has been happily

married for years, would give a very different answer to a subject who has undergone a recent divorce or separation. In order to minimize these 'accidental' or 'chance' environmental factors, the experimenter needs to know his subjects fairly well. He can then distinguish between subjects who are genuinely cognitively complex, and subjects who are not. The experimenter needs to identify and allow for differences in external circumstances, particularly those affecting the emotions, which influence mental functioning.

Cues and cue awareness was considered by Parlett (1974), in his work on students' approaches to grading and examinations. Parlett found that students varied in the importance which they attached to 'cues', sent out by staff about examinations. Some students were merely aware of the cues ('cue-conscious'), other students actively looked for cues ('cue-seekers'), and a third group of students were not aware of any cues at all ('cue-deaf'). In research into cognitive complexity, the issues and the relevance of these categories is whether their cognitive complexity is self-contained, isolated from reality, or does it inter-relate with the circumstances in which decisions have to be made? These issues are important to a consideration of the nature of cognitive complexity. i.e. is cognitive complexity a self-contained dimension of mental functioning, or does it relate to real-life?

How the experimenter actually tests a subject's cue awareness with respect to cognitive complexity, depends on the situation. For example, a subject who was emotionally involved in the situation in Ireland a few years ago, would probably have a high level of cognitive complexity with respect to his opinions on how the hunger strikers should be treated. Other subjects, who did not identify with the Irish situation in anyway, would probably indicate a low level of cognitive complexity. In everyday life, some people are so busy playing the game, that they are not aware of when they are being cognitively complex, and when they are not. My experimental fieldwork has shown that some people are cognitively complex with respect to their hobbies. On other

issues, such as the situation in Poland, these people display cognitive simplicity. There is an analogy in the inner conceptual consistency of cognitive complexity, to work on learning styles. Marton and Saljo (1976a, 1976b) found in their work on deep and surface approaches to learning a text, that the learner can adopt both strategies on the same occasion. With respect to cognitive complexity, a person can be cognitively complex right across the board on one occasion, but display both cognitive complexity and cognitive simplicity at another time, i.e. cognitive complexity can be situation-specific.

In summary, the methodology for studying cognitive complexity needs to be developed to include introspection on the subject's part, in order to identify why people are not consistently cognitively complex all of the time. Although it is impossible to check on the reliability of the introspections of subjects, their reports would indicate whether they are aware of when they are being cognitively complex, i.e. if they are cue-conscious.

Applying the Methodology

The interview situation in which I identified five types of cognitive complexity, namely true, disjunctive, borderline, no cognitive complexity and second-hand cognitive complexity, is an artificial situation, and the methodology needs to be developed so that it can be applied in real-life situations; in which people are facing complex decisions. Is cognitive complexity as I have redefined it, a useful predisposition in explaining how people solve problems, react and operate in real-life situations? In very complex situations, do the people attempting to operate in them display cognitive complexity?

Research into cognitive complexity needs to be carried out in real-life situations, such as the teacher solving problems in the classroom. Here the teacher will have to cope with problems relating to the teaching of a particular subject, including content,

level, presentation and teaching medium, discipline and attitude of the students or pupils, teaching environment, availability of necessary equipment, etc. The teacher will either solve these problems effortlessly, with effort, or will not solve them at all. Some of these problems, such as deciding which teaching technique to use, require more simple decisions. The teacher who can be cognitively complex or cognitively simple depending on the situation, will be effective in solving problems at many different levels in education.

The usefulness of cognitive complexity in this situation, could be developed into a long-term project (over 5-10 years), in which two or three teachers are interviewed about the kinds of problems they have to deal with in the classroom. For example, the teachers could be interviewed at regular intervals during the time they are probationary year teachers, teachers with special responsibilities, heads of department, etc. The interviews could take the same procedure as the '8 Topic Interview', but would be longer and in greater detail. An in-depth analysis of the interview transcripts, would include the categorisation of the types of cognitive complexity already identified, as well as a search for new evidence of cognitive complexity, e.g. breadth of context and depth of nesting. To give validity to my research findings, other people could act as independent judges, of the types of cognitive complexity displayed by my subjects.

Another example of a real-life situation in which people display cognitive complexity, is in the money market in the City. Here people are conducting very complex transactions between foreign banks, and are involved in making complex decisions. Is cognitive complexity of any use in this situation? Another example would be the entrepreneur who is faced with making a great deal of complex decisions, when he starts up a business from scratch. For example, where does he obtain the money to buy premises, recruit staff at a salary he can afford and secure clients to buy his product? How does he cover marketing costs, monitor the turnover of business, consider projects for expansion and deal with man-management problems? These are situations which call

for the kind of cognitive complexity that leads to clarity, and not the cognitive complexity that leads to confusion. The person who is unable to make a decision in these situations (i.e. the "dithering" kind) is likely to go out of business overnight.

A different kind of cognitive complexity is required by Senior Officers of the London Fire Brigade, who prepare contingency plans for major disasters, e.g. (hypothetically) two jumbo jets colliding over Richmond, or the Moorgate underground disaster. The thinking of these officers has to be very incisive and clear, as they map out a variety of procedures to be followed depending on the nature of the disaster. The Officers cannot be like President Carter, who although he was good at identifying the complexities of world problems, was unable to make decisions. The officer-in-charge at a major disaster has to identify the complexities of the problem, see the wood for the trees, and make an on the spot decision about the number of pumps and other equipment, he will require to deal effectively with the situation. The contingency plan which he adopts in the first place may change as the situation changes around him, and this is where cognitive complexity is of use. The officer who is diagnostic and productive in his cognitive complexity, will think ahead to possible problems that could occur, if the contingency plan he has adopted fails, due to circumstances beyond his control. In this situation, the officer has to act very quickly. For example, he has to think of possible gas explosions, escape of toxic chemicals, evacuation of members of the public, the need for more men, equipment in the wrong place, the need for other emergency services, etc. A series of interviews with Officers who have been involved in planning, or taking part in major disasters such as the Moorgate underground disaster, would provide valuable evidence about cognitive complexity.

Cognitive complexity is thus a vital subject for future research, because it is an important dimension of a person's mental functioning, when they are attempting to solve problems in everyday life. The world is a complex place and people are complex beings, who are complex in the way they operate. Often the situation is very complex around

them, and yet people seem to cope with the problems without much effort. Does the situation become simple when it becomes routine? In a complex situation, like a take-over bid for a company which involves dealing with complex issues and complex people, does the decision have to be complex? It may be the case in this situation, that a lot could be said for cognitive simplicity, i.e. a straightforward decision with no strings attached. The person who recognises that a cognitively simple decision would be beneficial to his business in this case, is displaying his cognitive complexity by the fact that he has arrived at this "simple" solution. Thus cognitive complexity is a useful dimension of mental functioning, which has implications on the way people solve problems in everyday situations, as well as more complex problems associated with education, business, industry and technology.

BIBLIOGRAPHY

References Mentioned in the Text

- Ausubel, D.P., Novak, J.D. & Hanesian, H. (1978) Educational Psychology. A Cognitive View. Second Edition. New York: Holt, Rinehart & Winston, Inc.
- Bannister, D. & Mair, J.M.M. (1968) The Evaluation of Personal Constructs. New York: Academic Press.
- Barron, F. (1953) Complexity-Simplicity as a personality dimension. Journal of Abnormal and Social Psychology. 48 (2), 163-172.
- Barron, F. (1969) Creative Person and Creative Process. New York: Holt, Rinehart & Winston, Inc.
- Barron, F. & Welsh, G.S. (1952) Artistic perception as a factor in personality style: Its measurement by a figure-preference test. Journal of Psychology. 33, 199-203.
- Berelson, B. (1952) Content Analysis in Communication Research. Glencoe, Illinois: Free Press.
- Berkowitz, L. (1957) Levelling tendencies and the complexity-simplicity dimension. Journal of Personality. 25, 743-751.
- Bieri, J. (1955) Cognitive complexity-simplicity and predictive behaviour. Journal of Abnormal and Social Psychology. 51, 263-268.
- Bieri, J. (1961) Complexity-simplicity and predictive behaviour. In Fiske, D.W. & Maddi, S. (Eds) Functions of varied experience. Illinois: Homewood.
- Bieri, J. (1966) Cognitive complexity and personality development. In Harvey, O.J. (Ed) Experience, structure and adaptability. New York: Springer Publishing Company.
- Bieri, J., Atkins, A.L., Briar, S., Leaman, R.L., Miller, H., & Tripodi, T. (1966). Clinical and Social Judgement. New York: John Wiley & Sons, Inc.
- Blaas, C.D. & Heck, E.J. (1978) Selected process variables as a function of client type and cognitive complexity in beginning counsellors. Journal of Counselling Psychology. 24(4), 257-263.
- Bodden, J.L. & Klein, A.J. (1973) Cognitive differentiation and affective stimulus value in vocational judgements. Journal of Vocational Behaviour. 3, 75-79.
- Bruner, J.S. Goodnow, J.J. & Austin, G.A. (1956) A Study of Thinking. New York: John Wiley & Sons, Inc.
- Castiglione, S.S. (Jr) (1981) Assessment of the learning disabled with regard to cognitive functioning and cognitive complexity. Journal of Learning Disabilities. 14(2), 74-80.

- Chaplin, J.P. (1975) Dictionary of Psychology. (Revised Edition) New York: Dell Publishing Company.
- Collins, J.K. & Worthington, A.G. (1978) Delayed auditory feedback and cognitive complexity of tasks. American Journal of Psychology. 91(1), 93-99.
- David, D.S. & Brannon, R. (1976) The forty-nine percent majority: The male sex role. Reading, Massachusetts: Addison-Wesley.
- Ehart, M.E. (1957) Cognitive complexity-simplicity in teachers perceptions of pupils in relation to teaching effectiveness. Unpublished doctoral dissertation. University of Illinois.
- Entwistle, N.J., Hanley, M. & Ratcliffe, G. (1979) Approaches to learning and levels of understanding. British Journal of Educational Psychology. 5, 99-114.
- Eysenck, H.J. (1941a) The general factor in aesthetic judgements. British Journal of Psychology. 31, 94-102.
- Eysenck, H.J. (1941b) "Type"-factors in aesthetic judgments. British Journal of Psychology. 31, 262-270.
- Gardner, R.W. & Schoen, R.A. (1962) Differentiation and abstraction in concept formation. Psychological Monographs. 76(41), Whole No. 560, 1-21.
- Gough, H.G. (1950) Predicting success in graduate training. A progress report. Berkeley: University of California, Institute of Personality Assessment and Research. Hectographed.
- Guilford, J.P. & Hoepfner, R. (1971) The Analysis of Intelligence. New York: McGraw-Hill.
- Harren, V.A., Kass, R.A., Tinsley, E.A., & Moreland, J.R. (1979) Influence of gender, sex-role attitudes, and cognitive complexity on gender-dominant career choices. Journal of Counselling Psychology. 26(3), 227-234.
- Harvey, O.J. (1966) Experience, structure and adaptability. New York: Springer Publishing Company.
- Heider, F. (1946) Attitudes and cognitive organization. Journal of Psychology. 21, 107-112.
- Heider, F. (1958) The Psychology of Interpersonal Relations. New York: John Wiley & Sons, Inc.
- Higgins, J.C. (1959) Cognitive complexity and probability preferences. Unpublished Manuscript. University of Chicago.
- Holsti, O.R., (1968) with the collaboration of Loomba, J.K., & North, R.C. Content Analysis. In Lindzey, G. & Aronson, E. (Eds) The Handbook of social Psychology. 2, Research Methods. 596-692. London: Addison-Wesley.
- James, W. (1890) Principles of Psychology. New York: Holt, Rinehart & Winston, Inc. 2 vols.
- Juniper, D.F. (1976) Decision-Making for Schools and Colleges. Oxford: Pergamon Press.

- Kagan, J., Moss, H.A. & Sigel, I.E. (1963) Psychological significance of styles of conceptualization. In J.C. Wright & J. Kagan (Eds.) Basic cognitive processes in children. Monographs of the Society for Research in Child Development. 28 (2, Serial No. 86).
- Kelly, G.A. (1955) A Theory of Personality. New York: W.W. Norton.
- Kelly, G.A. (1955) The psychology of personal constructs. Volumes 1 & 2. New York: W.W. Norton.
- Laurillard, D. (1979) The processes of student learning. Higher Education. 8, 395-409.
- Leventhal, M. (1957) Cognitive processes and interpersonal prediction. Journal of Abnormal and Social Psychology. 55, 176-180.
- Lewis, B.N. (1974) New Methods of Assessment and Stronger Methods of Curriculum Design. The first annual report on a research project sponsored by the Ford Foundation. Great Britain: The Open University.
- Lewis, B.N. (1981) An essay on error. Instructional Science. 10(3), 1-31.
- Lichtenberg, J.W. & Heck, E.J. (1978) The Interactional Structure of Interviews Conducted by Counsellors of Differing Levels of Cognitive Complexity. Paper presented at the Annual Meeting of the American Educational Research Association, Toronto, Ontario, CANADA in March, 1978.
- Lundy, R.M. & Berkowitz, L. (1957) Cognitive complexity and assimilative projection in attitude change. Journal of Abnormal and Social Psychology. 55, 34-37.
- Marton, F. & Saljo, R. (1976a) On qualitative differences in learning: I. Outcome and process. British Journal of Educational Psychology. 46, 4-11.
- Marton, F. & Saljo, R. (1976b) On qualitative differences in learning: II. Outcome as a function of the learner's conception of the task. British Journal of Educational Psychology. 46, 115-127.
- Mayo, C.W. & Crockett, W.H. (1964) Cognitive complexity in primacy-recency effects in impressing formation. Journal of Abnormal and Social Psychology. 68, 335-338.
- Miller, G.A., Galanter, E. & Pribram, K.H. (1960) Plans and the Structure of Behaviour. New York: Holt, Rinehart & Winston, Inc.
- Miller, C.M.L. & Parlett, M. (1974) Up to the Mark. A Study of the Examination Game. London: SRHE Monograph 21.
- Neisser, U. (1967) Cognitive Psychology. New York: Appleton-Century-Crofts.
- Osgood, C.E. (1959) The representational model and relevant research methods. In Pool, I. de S. (Ed). Trends in Content Analysis. Urbana: University of Illinois Press. 33-88.
- Pask, G. (1975a) The Cybernetics of Human Learning and Performance. A Guide to Theory and Research. London: Hutchinson & Co Ltd.
- Pask, G. (1975b) Conversation, Cognition and Learning. A Cybernetic Theory and Methodology. Amsterdam: Elsevier Scientific Publishing Company.

- Pask, G. (1976) Styles and strategies of learning. British Journal of Educational Psychology. 46, 128-148.
- Pask, G. & Scott, B.C.E. (1972) Learning strategies and individual competence. International Journal of Man-Machine Studies. 4, 217-253.
- Pettigrew, T.F. (1958) The measurement and correlation of category width as a cognitive variable. Journal of Personality. 26, 532-544.
- Pleck, J.H. & Sawyer, J. (1974) (Eds) Men and masculinity. Englewood Cliffs, New Jersey: Prentice-Hall.
- Plotnick, H.L. (1961) The relation between selected personality characteristics of social work students and accuracy in predicting the behaviour of clients. Unpublished doctoral dissertation. Columbia University, New York School of Social Work.
- Schneier, C.E. (1979) Measuring cognitive complexity: developing reliability, validity, and norm tables for a personality instrument. Educational and Psychological Measurement. 39, 599-612.
- Scott, W.A. (1962) Cognitive complexity and cognitive flexibility. Sociometry. 25, 405-414.
- Scott, W.A. (1963) Cognitive complexity and cognitive balance. Sociometry. 26, 66-74.
- Sechrest, L. & Jackson, D.N. (1961) Social intelligence and accuracy of interpersonal predictions. Journal of Personality. 29, 167-182.
- Stone, P.J. (1964) An Introduction to the General Inquirer: A Computer System for the Study of Spoken or Written Material. Harvard University and Simulmatics Corporation. (Mimeo).
- Svensson, L. (1976) Study Skill and Learning. Gothenburg: Acta Universitatis Gothoburgensis.
- Tomlinson, P. (1981) Understanding Teaching. Interactive educational psychology. UK: McGraw-Hill.
- Vannoy, J.S. (1965) Generality of cognitive complexity-simplicity as a personality construct. Journal of Personality and Social Psychology. 2(3), 385-396.
- Ware, E.E. (1958) Relationship of intelligence and sex to diversity of individual semantic meaning spaces. Unpublished doctoral dissertation. University of Illinois.
- Warr, P.B. (1970) (Ed) Thought and Personality. Harmondsworth: Penguin Books.
- Watts, J. (1983a) Cognitive Complexity: A Summary of doctoral research. Seminar paper presented at the Open University, Institute of Educational Technology, Walton Hall, Milton Keynes, MK7 6AA on 17th March, 1983.
- Watts, J. (1983b) A new approach to Cognitive Complexity. Seminar paper presented at the University of Alberta, The Centre for Advanced Study in Theoretical Psychology, Edmonton, Alberta, CANADA, T6G 2E9 in July/August, 1983.

- Welsh, G.S. (1949) A projective figure-preference test for diagnosis of psychopathology: 1. A preliminary investigation. Unpublished doctor's thesis, University of Minnesota.
- Witkin, H.A., Moore, C.A. Goodenough, D.R. & Cox, P.W. (1977) Field-dependent and field-independent cognitive styles and their educational implications. Review of Educational Research. 47 (1), 1-64.
- Zajonc, R.B. (1960) The process of cognitive tuning in communication. Journal of Abnormal and Social Psychology. 61, 159-167.
-

BIBLIOGRAPHY CONTINUED

References Consulted as Background Reading

- Abelson, R.P. (1963) Computer simulation of riot cognition. In Tomkins, S.S. & Messick, S. (Eds). Computer Simulation of Personality. New York: John Wiley and Sons, Inc. 277-298.
- Abelson, R.P. & Rosenberg, M.J. (1958) Symbolic psychologic: A model of attitudinal cognition. Behavioural Science. 3, 1-13.
- Ashby, W. Ross. (1956) An Introduction to Cybernetics. London: Chapman & Hall Ltd.
- Baldwin, A.L. (1942) Personality structure analysis: a statistical method for investigating the single personality. Journal of Abnormal and Social Psychology. 37, 163-183.
- Bandler, R. & Grinder, J. (1979) Frogs into Princes. Neuro-Linguistic Programming. Utah: Real People Press.
- Bandler, R. & Grinder, J. (1982) Reframing: Neuro - Linguistic Programming and the Transformation of Meaning. Utah: Real People Press.
- Bartlett, F.C. (1967) Remembering. A Study in Experimental and Social Psychology. Great Britain: Cambridge University Press.
- Bateson, G. (1973) Steps to an Ecology of Mind. Collected Essays in Anthropology, Psychiatry, Evolution and Epistemology. Great Britain: Paladin Books.
- Bateson, G. (1980) Mind and Nature. A Necessary Unity. Great Britain: Fontana/Collins.
- Beer, S. (1959) Cybernetics and Management. London: English Universities Press.
- Beer, S. (1979) The Heart of Enterprise. Great Britain: John Wiley & Sons, Inc.
- Beer, S. (1981) Brain of the Firm. (2nd Ed). New York: John Wiley & Sons, Inc.
- Berelson, B. (1971) Content Analysis in Communication Research. New York: Hafner.
- Berne, E. (1964) Games People Play. The Psychology of Human Relationships. New York: Ballantine Books.
- Binet, A. & Simon, T. (1916) The Development of Intelligence in Children. Translated by Elizabeth S. Kite. Williams & Wilkins.
- Boring, E.G. (1953) A history of introspectionism. Psychological Bulletin. 50, 169-189.
- Bruner, J.S. (1941) The dimensions of propaganda: German shortwave broadcasts to America. Journal of Abnormal and Social Psychology. 41, 311-377.
- Bry, A. (1976) 60 hours that transform your life: est. erhard seminars training. New York: Avon Books.

- Carney, T.F. (1972) Content Analysis: A Technique for Systematic Inference from Communications. London: Batsford.
- Crocker, A.C. (1974) Predicting Teaching Success. Great Britain: NFER Publishing Company Ltd.
- Cronbach, L.J. & Snow, R.E. (1977) Aptitudes and Instructional Methods. A Handbook for Research on Interactions. New York: Irvington Publishers, Inc.
- Davidson, D. & Hintikka J. (1969) (Eds) Words and Objections. Essays on the Work of W.V. Quine. Holland: D. Riedel.
- Dienes, Z.P. & Jeeves, M.A. (1970) The Effects of Structural Relations on Transfer. Psychological Monographs on Cognitive Processes. Vol. 2. London: Hutchinson Educational Ltd.
- Dillon, J.T. (1983) Cognitive complexity and duration of classroom speech. Instructional Science. 12, 59-66.
- Dilts, R.B, Grinder, J, Bandler, R, DeLozier, J. & Cameron-Bandler, L. (1979) Neuro-Linguistic Programming 1. Cupertino, CA95014: Meta Publications
- Ekman, P. (1965) Communication through nonverbal behaviour: a source of information about an interpersonal relationship. In Tomkins, S.S. & Izard, C.E. (Eds). Affect, Cognition and Personality. New York: Springer.
- Foster, R.J. (1981) Freedom of Simplicity. Great Britain: Triangle/SPCK.
- Gerbner, G, Holsti, O.R, Krippendorff, K, Paisley, W.J, & Stone, P.J. (1969) (Eds) The Analysis of Communication Content. Developments in Scientific Theories and Computer Techniques. New York: John Wiley & Sons, Inc.
- Gordon, D. & Meyers-Anderson, M. (1981) Phoenix. Therapeutic Patterns of Milton H. Erickson. Cupertino, Ca 95014: Meta Publications.
- Gorsky, D.P. (1981) Definition (Logico-Methodological Problems). Moscow: Progress Publishers.
- Grinder, J. & Bandler, R. (1981) Trance-Formations: Neuro-Linguistic Programming and the Structure of Hypnosis. Utah: Real People Press.
- Hall, C.S. and Van de Castle, R.L. (1966) The Content Analysis of Dreams. New York: Appleton Century-Crofts.
- Hamilton, T. (1942) Social optimism and pessimism in American Protestantism. Public Opinion Quarterly. 6, 280-283.
- Harvey, O.J, Hunt, D.E. & Schroder, H.M. (1961) Conceptual Systems and Personality Organisation. New York: John Wiley & Sons, Inc.
- Holsti, O.R. (1969) Content Analyses for the Social Sciences and Humanities. London: Addison-Wesley.
- Hubbard, L.R. (1950) Dianetics. The Modern Science of Mental Health. A Handbook of Dianetic Procedure. U.S.A: The Church of Scientology of California Publications Organization.

- Hunt, D.E. & Sullivan, E.V. (1974) Between Psychology and Education. Hinsdale, Illinois: The Dryden Press.
- Illich, I. (1979) Limits to Medicine. Medical Nemesis: The Expropriation of Health. Great Britain: Penguin Books.
- Jackson-Beeck, M. & Meadow, R.G. (1979) Content analysis of televised communication events. The Presidential Debates. Communication Research. 6(3), 321-344.
- Jourard, S.M. (1968) Disclosing Man to Himself. London: D. Van Nostrand Company.
- Kepner, C.H. & Tregoe, B.B. (1965) The Rational Manager. New York: McGraw-Hill.
- Kleinmuntz, B. (1967) (Ed) Concepts and the Structure of Memory. New York: John Wiley & Sons, Inc.
- Knight, R. (1943) Intelligence and Intelligence Tests. (2nd Ed). Methuen.
- Krippendorff, K. (1980) Content Analysis. An Introduction to its Methodology. London: Sage.
- Krishnamurti, J. (1977) Truth and Actuality. London: Victor Gollancz Ltd.
- Lakein, A. (1973) How to get Control of your Time and your Life. New York: Signet Books.
- Landau, R. (1972) Complexity. (or how to see the wood in spite of the trees). Architectural Design. 42(10).
- Lasswell, H.D. (1927) Propaganda Technique in the World War. New York: Knopf.
- Lasswell, H.D, Leites, N. & Associates. (1949) Language of Politics. Studies in Quantative Semantics. Cambridge, Massachusetts: M.I.T. Press.
- Lasswell, H.D., Lerner, D. & Pool, I. de S. (1952) The Comparative Study of Symbols. Stanford: Stanford University Press.
- Lewis, B.N. & Pask, G. (1982) The development of communication skills, under adaptivity controlled conditions. Programmed Learning and Educational Technology. 19(2), 85-98.
- Lewis, C.S. (1964) Reflections on the Psalms. Great Britain: Collins Fontana Books.
- Lewis, C.S. (1969) A Mind Awake. An Anthology of C.S. Lewis. Ed. by Kilby. London: Geoffrey Bles Ltd.
- Lewis C.S. (1974) Mere Christianity. Great Britain: Collins Fontana Books.
- Macdonald-Ross, M. (1974) Glassbeads and geometric monsters. The problems of representing knowledge. Paper presented to the Research and Theory Division of the Association for Educational Communications and Technology, Atlantic City N.J. March. 1974.
- Marton, F., Hounsell, D. & Entwistle, N. (1984) The Experience of Learning. (Eds.) Edinburgh: Scottish Academic Press.

- McGuire, W.J. (1968) Theory of the Structure of Human Thought. In Abelson, R.P., Aronson, E., McGuire, W.J., Newcomb, T.M., Rosenberg, M.J. & Tannenbaum, P.H. (Eds) Theories of Cognitive Consistency: A Sourcebook. Chicago: Rand McNally & Co.
- McMaster, M.M. & Grinder, J. (1980) Precision. A New Approach to Communication. Beverley Hills, California: Precision Models.
- Melton, W.A. & Martin, E. (1972) Coding Processes in Human Memory. Washington, D.C: V.H. Winston & Sons.
- Morris, L.L. & Fitz-Gibbon, C.T. (1978) How to Measure Achievement. London: Sage.
- Newell, A., Shaw, J.C. & Simon, H.A. (1958) Elements of a theory of human problem-solving. Psychological Review. 65(3), 151-166.
- Newell, A., & Simon, H.A. (1965) An example of human chess play in the light of chess playing programs. In Wiener, N. & Schade, J.P. (Eds). Progress in Biocybernetics. Vol. 2. London: Elsevier.
- O'Neil, H.F. (Jr) (1978) (Ed) Learning Strategies. New York: Academic Press, Inc.
- Osgood, C.E. (1953) Method and Theory in Experimental Psychology. New York: Oxford University Press.
- Osgood, C.E. & Walker, E.G. (1959) Motivation and language behaviour: content analysis of suicide notes. Journal of Abnormal Social Psychology. 59, 58-67.
- Pask, G. (1963) Models for social systems and for their languages. Instructional Science. 395-445.
- Pool, I. de S. (Ed) (1959) Trends in Content Analysis. Urbana: University of Illinois.
- Postle, D. (1980) Catastrophe Theory. Great Britain: Fontana Paperbacks.
- Quine, W. Van Orman. (1979) Word and Object. Cambridge, Massachusetts: M.I.T. Press.
- Rajneesh, B.S. (1977) The Supreme Doctrine. Discourses on the Kenopanishad. London, Boston and Henley: Routledge & Kegan Paul.
- Robinson, R. (1972) Definition. Oxford: Claredon Press.
- Rogers, C.R. (1961) On Becoming a Person. A Therapist's View of Psychotherapy. Boston: Houghton Mifflin Company.
- Royce, J.R. (1975) Three ways of knowing and the scientific world-view. Paper presented at the Fourth Conference for the Unity of Science, New York.
- Schank, R.C. & Abelson, R.P. (1977) Scripts, Plans, Goals and Understanding: An Inquiry into Human Knowledge Structures. Hillsdale, New Jersey: Erlbaum.
- Schramm, W. (Ed) (1959) One Day in the World's Press. Stanford: Stanford University Press.

- Schroder, H.M., Driver M.J. & Streufert, S. (1967) Human Information processing. Individuals and Groups Functioning in Complex Social Situations. New York: Holt, Rinehart and Winston, Inc.
- Schroder, H.M. & Streufert, S. (1962) The measure of four systems varying in level of abstractness (sentence completion method). Technical Report. No. 11, Office of Naval Research.
- Schroder, H.M. & Suedfield, P. (1971) (Eds) Personality Theory and Information Processing. New York: The Ronald Press Company.
- Scott, D. (1980) How to Put more Time in your Life. New York: Rawson, Wade Publishers, Inc.
- Sheil, B.A. (1981) Coping with complexity. Cognitive and Instruction Sciences. April. 1-30.
- Sherif, C.W. & Sherif, M. (1968) (Eds) Attitude, Ego-Involvement, and Change. New York: John Wiley & Sons, Inc.
- Shneidman, E.S. (1969) Logical Content Analysis: A explication of styles of concludifying. In Gerbner G., Holsti O.R., Krippendorff K., Paisley W.J. & Stone P.J. (Eds). The Analysis of Communication Content. Developments in Scientific Theories and Computer Techniques. London: John Wiley & Sons, Inc. 261-279.
- Spearman, C.E. (1927) The Abilities of Man. London: Macmillan.
- Starkweather, J.A. (1956) Content-free speech as a source of information about the speakers. Journal of Abnormal and Social Psychology. 52, 394-402.
- Steiner, C.M. (1982) Scripts People Live. Transactional Analysis of Life Scripts. Toronto: Bantam Books.
- Stone, P.J, Dunphy, D.C, Smith, M.S. & Ogilvie, D.M. with associates. (1966) The General Inquirer: A Computer Approach to Content Analysis. Cambridge, Massachusetts: M.I.T. Press.
- Sutherland, N.S. (1977) (Ed) Tutorial Essays in Psychology. Vol. I. New Jersey: Lawrence Erlbaune Associates.
- Terman, L.M. & Merrill, M.A. (1937) Measuring Intelligence. London: Harrap.
- Terman, L.M. & Oden, M.H. Genetic Studies of Genius. (1925) 1. Mental and Physical Traits of a Thousand Gifted Children. (1926) 11. The Early Mental Traits of Three Hundred Geniuses. (1930) III. The Promise of Youth. (1947) IV. The Gifted Child Grows up. (1947) V. The Gifted Group at Mid-Life. (1959) Stanford, California: Stanford University Press.
- The Committee on Bible Translation. (1979) The Holy Bible. New International Version. London: Hodder & Stoughton.
- Thom, R. (1975) Structural Stability and Morphogenesis. An Outline of a General Theory of Models. Reading, Massachusetts, 574. 401514: W.A. Benjamin, Inc.
- Thorndike, E.L. (1922) Practice effects in intelligence tests. Journal of Experimental Psychology. 5, 101-107.

- Thorndike, E.L. et. al (1928) Adult Learning. New York: Macmillan.
- Tzu, L. (1979) Tao Te Ching. Great Britain: Penguin Books.
- Warner, J. (1982) Dr. Einstein's Marvellous Flying Machine. Readers Digest. 121(742), 52-54.
- Watts, J. (1973) Transfer, intelligence and learning styles in secondary school learning. Unpublished master's dissertation. University of London.
- Watts, J. (1979) An investigation into the relationship between cognitive complexity and memory for faces, word lists and prose. Unpublished Pilot Study. The Open University.
- Watts, J. (1980) Imagery and concreteness in memory for English nominalisations. Unpublished Pilot Study. The Open University.
- Watts, J. (1981a) Cognitive Styles and Cognitive Complexity : A review of literature. Unpublished Report. The Open University.
- Watts, J. (1981b) Supplementary references to Cognitive Styles and Cognitive Complexity: A review of literature. Unpublished Report. The Open University.
- White, R.K. (1949) Hitler, Roosevelt and the nature of war propaganda. Journal of Abnormal and Social Psychology. 44, 157-174.
- White, R.K. (1951) Value-analysis: the Nature and Use of the Method. Glen Gardiner, New Jersey: Libertarian Press.
-

CONTENTS

VOLUME 2

PART THREE Appendix. Transcripts of subjects from the '8 **TOPIC INTERVIEW'**

TRANSCRIPT 1	Adrian	1
TRANSCRIPT 2	Arthur	56
TRANSCRIPT 3	Ben	79
TRANSCRIPT 4	Bertram	105
TRANSCRIPT 5	Bill	117
TRANSCRIPT 6	Dean	160
TRANSCRIPT 7	Derrick	173
TRANSCRIPT 8	Gene	214
TRANSCRIPT 9	James	236
TRANSCRIPT 10	John	272
TRANSCRIPT 11	Joss	286
TRANSCRIPT 12	Lance	316
TRANSCRIPT 13	Mark	347
TRANSCRIPT 14	Nevill	440
TRANSCRIPT 15	Peter	462
TRANSCRIPT 16	Robert	495

PART THREE

Appendix

Transcripts of Subjects From

the

'8 TOPIC INTERVIEW'

Interview with Adrian

Interviewer O.K. then Ad'n how do you see the present situation in Poland?

Adrian I'm actually very interested in it. I'm not usually very involved in politics and I've paid a lot more attention to the Polish situation than I would normally be expected; than I would normally expect myself to do. I've been very moved by a Polish film that showed the negotiation between the Polish Central Committee, or the communist party machine, and Solidarity. It must have been a film taken and was only released in this new freedom thing. It was a beautiful...

Interviewer Was it? this was fairly recently?

Adrian It was about three week ago and I was ... I've also been spending a lot of time with a Russian girl, and she and I watched it just talking about the hopelessness of anything comparable to that happening in Russia. She's a dissident so a very interesting perspective to be watching a Polish film, and maybe because of her I've been more interested in Poland; but that's one factor. Also, I admire the Pope for the delicate role that he has been taking, and I admire the Solidarity leader, I personally thought that they had gone a little bit too far by challenging workers in Russia to join them, I thought that was pushing their luck. um... I remember the build up for the Russian forces on the edges of Poland; and essentially the West doesn't want Russia to invade Poland, I thought (for the first time I thought) my God you know we are conceivably on the edge of a war, because here is Reagan feeling that he can't control things at home and that idiots are causing him great physical pain personally - he's a sick old man is Reagan

Erratum

For page 1A, please read page 55.

This page was numbered incorrectly and bound as page 55.

Apologies.

The author.

Interviewer

Oh really. Was it shown here?

Adrian

It was shown on B.B.C. like one or two, and would totally not have been allowed out before Solidarity came into existence and caused greater freedom to happen. So it's part of what the B.B.C. managed to show whilst thanks to Solidarities, and it was... anyway in the middle of that film suddenly someone called out "let us pray" and um.. there were the workers, who were all locked in because they were on strike, and families were sort of coming and bringing them food and it was all well organised. But when it was time for prayer and they thought it was time for prayer - they prayed. They prayed to Mary the mother of Poland, and for the first time I had a sense of enormous potential political power of the unifying power of a church. It doesn't matter what church. But I would understand how terrifying that expression of loving unity, praying to Mary mother of Poland, praying to the brotherhood of all Polish people, praying for peace, praying that this strike should not end in bloodshed and there is a tremendous unity based on love, and that is a force that is quite hard politically. It was so obviously not bourgeois, some of the workers were in tears towards the end of the film, tears that (I remember one of the old workers saying "you mean people actually care how we the workers live, they care whether we have decent conditions for work") because it certainly didn't seem as if the present management of Poland cared. So that's how in a nut-shell I'm viewing Poland - I... I'm aware that the second meeting of congress is happening. I believe it to be happening. I hope it's happening. But I don't buy a newspaper.

Interviewer You watch television do you?

Adrian I watch the news and I borrow a friend's newspaper and if I see something on Poland I tend to read it and um 'The Guardian' in brackets 'The Times' and 'The Sun' for the third page.... That's my reading.

VIOLENCE ON TELEVISION

Interviewer Thanks Ad'n, Right to change the subject, have you got any views on violence on television.

Adrian I watch quite a lot of violence on television, I'm quite addicted to it.

Interviewer What television or the violence?

Adrian I'll tell you what I'm addicted to, I was addicted to 'Kojak'

Interviewer Oh yes, yes.

Adrian Last night I did not watch 'The Rockford Files', the previous week I did watch them and the newspaper description talked about some adaptation from someone linked to the authorship of 'Jaws', which is a ...'Jaws' is a movie of sharks eating people.

Interviewer That's right yes, I think there's 'Jaws I' and 'Jaws II'.

Adrian Yeah, I have not watched 'Jaws I' nor 'Jaws II' and that movie, I was expecting it to be violent and it wasn't very violent, there was a totally unnecessary... the mental age of that story was so bad that I turned it off last night. I had to watch it through to the end the previous week, God it remained bad! it was a um what's the word it's not word plagiarism but some other word, it's kind of a ... they didn't manage to get any conception, yes it was violent but not it was so clearly fake it was just boring.

Interviewer Artificial violence?

Adrian Yes it was pretty....

Interviewer That's not really right either um...

Adrian It's certainly...

Interviewer Make believe.

Adrian Yes, I mean there were black people being eaten by sharks. But, I mean they were such wickedly black people. Obviously the way they were being eaten by sharks was so unlikely and unnecessary, and pointless and unexciting. The outcome of the goodies beating the baddies was so obvious, that it was a total , total bore. So that's even put me off my addiction to that kind of, what I would have called, the same thing that

people used to read thriller for - Agatha Christie I think that's why people have, my guess is that people have gone, if they are watching T.V. like me, they have moved from cops and robbers to spies. Cops and robbers used to be quite clever in their detection. A good one was 'Columbo'.

Interviewer

I can't remember that actually.

Adrian

He always walked around in an old mackintosh and spoke out of the side of his mouth, and some of his perceptiveness.... You see, like in Agatha Christie or Sherlock Holmes, they're all the same. It's clever perception. So violence per se is probably not what I'm looking at, it happens to be the clever ambivalent perception with some sense of excitement is what I'm looking at. Now you asked me to think and talk about violence on T.V.

Interviewer

Well it might be that you don't consider that programmes are violent these days.

Adrian

Those programmes that I have just spoken of, always involves people being killed and beaten up, which if you are being killed or beaten up, is experienced by you as quite violent.

Interviewer

Yes, 'The professionals' for example is quite violent.

Adrian

And I used to be a keen watcher, I did watch just about their latest one in which they were in the dock being accused of, but gosh, not very bright plots. In case you haven't watched,

the informer gets named in court so that the baddies who are being defended as being the goodies, the baddies, - they're trying to say that 'The Professionals' are bad, but of course, the Professionals are never bad, they're only misunderstood, so this lady barrister is defending them - she's defending the genuine baddies, not 'The Professionals' and she forces 'The Professionals' to name their informer in court. 'The Professionals' don't want to name their informer they say, 'it'll put...' but the court says, 'Yes of course you must' because the court is bad and 'The Professionals' are the good guys through and through. Instantly - that is to say the same evening whilst the court is still in the process of trial and judgement, instantly, within an hour the baddies go and beat up the informer, well that's so bloody silly that however dumb people are, they're not that dumb. So 'The Professionals' is once again getting to be boring, violence per se isn't attracting me, there's a certain excitement, there's a certain fun and ambiguity, once it gets too dumb or too predictable it doesn't please me. I never saw 'Clockwork Orange' because friends of mine told me it was not, that it was too violent for me to watch.

Interviewer

I think another in that field was 'The Godfather'. Was that about the same time?

Adrian

I hear that 'The Long Good Friday' is quite violent and I will hope to see that.....

Interviewer 'The Long Good Friday' um.....

Adrian It's said to be like 'The Godfather' but is still current. It also slightly depends on friends or girlfriends because I watch T.V. by myself but I don't watch films by myself usually. Do I think that violence is affecting children? I haven't got any children.

Interviewer Would you say that sports like boxing or karate are fringe violence?

Adrian Oh I certainly think, certainly the way I watch boxing is wanting to see the violence, not watching it really as a work of art, I'm watching it linked to violence. um..Yeah, and that's why I prefer the heavyweights to the welter weights and other things, you get more people bashed up more and welter weights things it's more technical excellence, so clearly you can see that I'm watching them; or I can see that I'm watching them to see bashing up.

Interviewer Well they go, I mean heavyweights don't they usually box fifteen rounds, whereas welters are three, or is that something between amateur and professional boxing?

Adrian I think that's more between amateur yep, yep. No it's simply that bigger guys can smash each other more I think, you do get knockouts with a sort of... I also think in context, that I am brought up a pacifist totally non-violent, I am not now a pacifist, but I would describe myself as a very gentle person

so that I would have seen my watching of this as some kind of vicarious fulfilment. I do sometimes kick my cat, but I always kick it in such a way that I miss it.

Interviewer Poor Korky (Laughing).

Adrian Yes, poor Korky. But I kick him in such a way that I miss him because I'm in pain but I don't know what to do, I could kick myself; I'm talking about violence now as directed, something is bad so I am trying to get my way out of it. I can kick myself or I can kick my cat or I can sort of; you ask me to talk about violence on T.V. and I'm talking about why do I get - sort of amateurishly commenting on why I get the satisfaction I do from watching boxing. I don't watch much wrestling I think it's um... to fake, too boring, but I have really very little opportunities for violence in my life.

Interviewer You say you have changed from being a (to qualify your statement) wholly pacifist to being a gentle person.

Adrian Yes, that seems like a change for the better and a change from like, I mean, I was going to say many socialists. I could qualify that and say most socialists believe in equality and sharing as a theory. However, they are in fact a very greedy, selfish, wealth possessing people, who are not about to share anything when it comes down to their possessions, with anyone, so it's a theory it's an ism - socialism, pacifism. Pacifists are not peaceful human beings in my opinion. Socialists don't give a fuck for society in my opinion. They just theoretically

do in both cases. So that in, when I say that I'm trying to shift from being a pacifist, the attempt is actually to make gentleness a part of me, um... if I thought that socialists were actually generously loving all members of society and were not themselves egotistical then, I'm not quite sure what word, but they would by my language cease to belong to a belief system they would belong to a practice system, and I'm more in favour of practice than in belief, beliefs or ism's, so that's why. My reason for speaking in this way is cos I think pacifists and socialists but let's focus on pacifists, their anger and mine have been very badly repressed their capacity for violence has been repressed.

Interviewer

Your innate capacity.....

Adrian

Um. Has been repressed and so this is a shift towards allying my anger opportunity for expression in other than sarcastic or academically approved oblique competitive way.

Interviewer

Would you say, Ad'n, that violence in television programmes and fringe violence in sports such as boxing which one could call a violent act, aid violence in the home?

Adrian

What I seem to be saying is that by allowing that violence some expression, even if it's vicarious actually might diminish violence in the home, and by that I mean they might increase its minor eruption. You see, being a pacifist, I am brought up and expected perfect harmony, total peace, total non-violence, so the problem with that; of course there is no

violence, there's no place for anger either, and so it gets very repressed and if you repress anger you repress all the other emotions too, like love, they all get repressed and idealised. So I'm left with.... depends what sort of a home. We, in my sort of a nice peaceful home, would so disapprove of such films that we wouldn't watch them. We would be sick to watch them, but then I'm old enough not to have grown up with T.V. so I don't know, speaking of children, and as I say I have no children, but back to um... I'm saying that a little bit of violence aired in family situations seems to me like a safety valve on a boiler. That if you shut that safety valve off totally and have no violence, you've potentially got it erupting like a volcano - worse. And... But that doesn't... Does that answer what you're.....?

Interviewer

Yes.

Adrian

Well, I mean it speaks obliquely to it. That's at least my theorising on..... As to whether violence on T.V. could actually get more of violence than there was, whether you'd copy it... See, I believe that personal violence is based on personal anger and pain and suffering and stuff. That I would act violently because I'm in pain and I want to change something um... I can't imagine that.... No, I don't know. I haven't much thought. The other thought I do have. That is, if people eat meat, which I do. The people whom I would most admire who eat meat would be those who also kill the animals that they eat. So if you want to kill a human being, my preference would be to practice on animals, preferably fairly big ones

like cows. I would prefer people to kill them as much as they can with their own fingers and hands and knives and things, so that they experience killing, the trouble with the T.V. movie 'The Professionals' is that killing is made to appear tremendously distant and bloodless, you don't get much of what it feels like either to kill or be killed, so that in that sense I could see the danger in killing becomes a fairy tale, it becomes something that's as unknown and unexperienced to the individual as is the beating of his heart, I mean, it just almost disappears so that I'd like killing or violence and the pain that causes, I guess.... I would like T.V. violence always to show the two sides of violence - both the person doing it and the person receiving it. I would feel that that would be a nice safeguard um... because I'm not trained to make the world an unpleasant place to live in, that's absolutely not my aim. But I don't think it's but certainly my family's approach of making it perfect just drove us out of this world altogether, we were just.....

Interviewer

It's impossible.

Adrian

Yes, it was too ideal and it's amazing that I didn't then swing into being a total gangster.

Interviewer

Going to the other extremes.

Adrian

My brother went to a fair extreme and just went and lived in the desert for ten years. So at least he's not um... he's

fairly non-violent, but it's Tell you the name.... 'All Quiet on The Western Front'. Did you ever see it?

Interviewer

No.

Adrian

I'll give the story away, if you don't mind. It's said to be a very famous world-war-one movie and yes, it's a good... world war one, I was admire.... I mean whenever Britain is feeling low it shows masses of war movies to try because it was the only time that Britain ever pulls together or gets cheerful is in the war, so there's a very positive role for violence. 'Britain keep together when Britain is being violent', not against each other, but for the first time their inter-family violence of class against class is against the outside invader, and the nuclear threat has made war so difficult. So anyway here's this world-war-one movie and a lot of people are dying and there are all these terrible trench things and they always are really terrible and um.... you get really sad for the mother whose little son gets wounded, he comes back and then he has to go back to the front again and she gets sad, and she, and there's lovers and sisters and - you must have watched this 'Testament of Youth', Shirley Williams' mum's story, very famous.

Interviewer

I possibly have actually, but I can't remember.

Adrain

That was world war one again, it got serialised in the Sunday papers, beautiful, very, very moving.

Interviewer I've only had a television from the beginning of this year.

Adrian Oh! So slowly we are going to get to the point, cos as I said, I would give away the point, anyway the point is; here's all this pain and suffering, identification - at the very end you realise that what you've seen was a German, only for me at the end did I realise. What they've done you see, they've made all these German guys speak English, perfect English, they tricked our whole sympathy and sorrow into being in this instance for the Germans, but we were fighting them, and you suddenly realise 'my God the same pain was on both sides'.

Interviewer It's very clever.

Adrian Beautiful, beautiful and I was very moved by that.

Interviewer Right thanks, I think we've got enough tape on there for the next one.

BALLONS - SOLAR-ENERGY

Adrian Balloon and solar energy, I saw people trying to use little bits of paper and wings and bicycle - this is a balloon.

Interviewer It was a double skinned balloon if you like filled with

Adrian

Presumably with hydrog... with gas.

Interviewer

And with little cells which reacted to solar energy, I think it was rather like this, there was some description in 'The Observer' and what I was going to ask you was whether you saw ballooning as a form of transport in the future, this fellow crossed the channel in about two hours plus, I think it was a fairly good crossing.

Adrian

No, I think you're asking me two questions there. You're asking me to comment on ballooning and on the use of solar energy, or are you not asking me two questions?

Interviewer

That's right, yes, I am asking you two questions.

Adrian

Do you want to ask me three questions or not, I'll tell you what my third question would be, are you commenting about our use of wind, and wind as a source of power?

Interviewer

No, I mean it's in the back of my mind that you might well comment on that yourself, or canals, or something like this as alternative forms of transport, my third question would be, have you got any thoughts or feelings about solar heating ventures up here in Milton Keynes?

Adrian

I've just, let me begin with that one I have just....

Interviewer Will that be easier for you to talk about that one?

Adrian I've just written - I can much easier talk on that one because I have just written back to two enquiries that came through my door saying, 'yes, please consider using my house for solar heating experiments'.

Interviewer It's very interesting actually I've been up to Solar Court here and had a look um....

Adrian So, and there's a man I know who does have a solar gadget on his, and he is an old man and I'm impressed that such an old man should have tried it long before me. But if he can try it I can try it, no, but then there were these two enquiries, the last time I filled - I think I filled out one before but nobody came to speak to me or follow it up so I didn't follow it up. Why am I not following it up? Too much hassle - I don't want to lay out any more money, or at least not big time money, and I imagine it's too much hassle. My reason for following it up this time is because I've got one new piece of space or room in my house, namely, the outbuilding which has a roof on which a panel could be sighted, without it being too ugly or unsightly. I'm not prepared to have too much ugliness for the sake of saving money unless I'm really short of money and as long as I'm with the O.U. then I'm not that short that I... I mean part of working for the O.U. is this sometimes ugly environment (which this office is absolutely not, this office is lovely).

Interviewer

This is delightful isn't it?

But then I face north so I never see the bloody sun, thanks to the O.U. But if I never see them if their price is to cut me away from the sun, then I'm damned if they are going to cut me into living in an ugly environment for the rest of the days when I'm not here. So beauty is important. Now, solar energy? It's as far as I've gone practically and as long as I'm working for the O.U. there's not than an enormous incentive to save energy and fuel. If I were made redundant or something and way trying to subsistence live, then certainly, I would (if it seemed like a reasonable return, put my capital into things to save fuel) because because cash flow becomes the biggest problem, but at the moment the capital and the effort isn't being called for. The efforts all going into my O.U. work rather than into constructive ways to save me money, they pay me money so I spend it in the easiest way I can, whereas, if I'm not getting money then I put all of my energy into trying to save money. I'm not putting my energy into saving money, I'm thinking about solar energy and panels and assessing them and so on - takes energy and effort and money - takes capital - takes altering my lfie. So that's why I haven't done it. Apropos nothing in particular, I would and admire sailing boats as opposed to power boats as a form of leisure and pleasure, so it's I'm into being sensitive to the forces and natural powers available. I would be delighted if oil tankers could be designed that would.... because they've been thinking of making sailing oil tankers, I think that would be a lovely idea because they've got plenty of time and I'm always into

17

saving... I would love the Severn Boar to be, I would absolutely pro all forms of energy usage like little things that would use waves, the energy that's locked up in a wave on the water, a little waggling gadget that I believe could store that. So I'm pro all of those, I would be delighted to put as many coal miners out of work as I could put out of work because I think it's a.... I think - they may not think so - but, I think it's a rotten job spending a large part of your life down in the earth. If I think it's rotten being in a North facing office, I think it must be even worse down below. So, I'm not trying to put them out of work to give them some more joyful employment. So they can all be servicing little something else, but they wouldn't be... I don't want... I want humans to have fun and have a good life.

Interviewer

I think I'll turn over the tape there Ad'n, that's quite convenient. O.K. then, would you like a cigarette?

Adrian

No thanks, no, but do smoke if you want to.

Interviewer

Are you sure?

Adrain

I will have a glass of water.

Interviewer

Um., ... yes, I don't know how long that's been there, that's ... I think that's Bill's or possibly Mark's, I'm not sure.

Adrian

It's an amazing cup of coffee.

Interviewer

I think it's got a fungus on it. Do you mean the size of the mug or the?.... I think Mark has, you know, the other desk here, but Bill - this is the second week he has been away, so they've sort of given me this room to do my interviews in, which is rather nice because I'm sharing a room with Phil and Margaret Spear.

Adrian

I see! I thought this was your desk and that was why I was rather jealous.

Interviewer

No, this is the Deputy Director's. (Laughing).

Adrian

I was being quite jealous, 'after all the years I've been here and they still keep my facing north' (Laughing).

Interviewer

This is Bill's room and I think Mark uses that desk, but when Bill is not here he lets me use it, which is rather nice of him actually.

Adrian

'Tis nice.... Well, I've talked about... I haven't answered your question I suppose, I was aware of the concept of life rafts being pulled along by kites, so that kite power is another form of power that I think is intriguing, because most life rafts, you drift and it might be a better way to have some means of sailing a life raft, but mostly they purely are drifting waiting to be picked up.

Interviewer Like a catamaran?

Adrian No! no, they're just like a cork or a bottle, they do absolutely nothing except float and you wait to be picked up, or you wait to be drifted ashore, you can't control. So kites I've heard of, I mean is your question 'do I think that British Airways Corporation are going to stop buying engines and start running their service balloons, not obviously in the next year, but five or ten years from now, do I see balloons as a major means of intercontinental transport, is that your question?

Interviewer Yes, but bound up in that would be an alternative form of transport, if you use something the size of a zeppelin.

Adrian I forget exactly why zeppelins went out of fashion, um...

Interviewer I think they were before my time, actually I'm sure they were.

Adrian You see if zeppelins only went out of fashion because of the problems with the gas, mainly the use of hydrogen, and because it was difficult to obtain helium, if helium is now cheap, then potentially, that is a very interesting way to get about and I personally would quite like a small zeppelin, not to get me from home to work but to get me from here to the coast, and I would certainly be a potential customer for a small two man or four man zeppelin because going straight to the coast with a little motor cycle engine puttering away at the back at, I wouldn't care if it was fifty miles an hour,.. that's still quicker than going by car because there's less....

Interviewer There's the question of reliability though compared with public transport.

Adrian You're meaning private zeppelins versus public zeppelins?

Interviewer Yes, and a zeppelin versus British Rail stroke bus corporation, bus company rather.

Adrian Zeppelins have a lovely advantage, I would have said they would have been just as reliable as a bus unless of course, it was very stormy, you have the same trouble in this discussion between an old fashioned ferry, cross-channel-ferry, and a hydrofoil-ferry, the old fashioned ones will take up to force nine or ten gales and the hydrofoils give up at six. Well, clearly, a bus will get through where a zeppelin will have to stop. In my opinion, I'm a very rational and reasonable man, so that anything you ask me will be reasonably answered. I think I'm... I think I'm free of prejudices.

Interviewer If I expand that question a little bit - during summer months one gets large numbers of people and families desiring to go to the coast in which they use the family car, so you get a lot of traffic on the roads which often results in congestion and jams down to, for example, the coast. If you had an alternative service in the form of a balloon travel or zeppelin travel etc., using um... solar energy in the form of, in connection with, solar cells on the balloon or zeppelin or whatever, wouldn't this be an alternative means of travelling?

Adrian

No, I think you're getting yourself muddled again. I think you're muddling public transport. An alternative means would be.. You can get to Brighton by car you can get to Brighton by train. Or you can get to Britain by private zeppelin, or you can get to Brighton by public zeppelin, those are the four. We've talked about.... What do you want to talk about, public versus private or train versus public zeppelin?

Interviewer

It doesn't particularly matter actually.

Adrian

I don't give a shit. I don't like this sort of question very much. It's too open ended. I do like the idea that zeppelins don't need a whole lot of roads, and if we don't have a whole lot of roads we can plough more acres up for land and growing food. We'd have to... There would have to be tremendously tight control over the air space. I also don't want a whole lot of people flying over my garden. I might want them kept along the M.1. rather than.... I sure as hell don't want to live under some air equivalent of the M.1. That would actually make me more sick than living near the M.1. Nobody lives on the M.1. because they would get killed (Laughter), but to have zeppelins going between me and the sun every five minutes, or every one minute; would be totally unbearable for me. So there's a prejudice that I do have, strongly held, because people with.... who lack prejudices also, I've just discovered, lack values. So not only do I have no prejudices, I value nothing. Well, I've just corrected that. I value the sun - immensely and deeply.

Interviewer Yes, you made that point when you said that you've got your North facing room. (Laughing).

Adrian Yes. (Laughing) yes.

DEVELOPMENT OF THE THIRD WORLD

Interviewer Right, to change the topic of discussion. Have you got any views on the development of the third world politically and economically.

Adrian There was a report, which I have a feeling was called the Brandt report, it seems to me that developed countries should be taxed substantially to help people.... No, I think I'm going to.... I think I don't I think maybe ... I was going to say to help people in the third world. Why I began to back away from that statement is because if people in the third world are enjoying their lives more than I'm enjoying my life, then I certainly don't want to help them, I want them to help me. Now if people in the third world are starving then they sure as hell aren't enjoying their life, in which case, as a fellow human being on this earth, that does seem to me (not that I'm doing anything for them at all at the moment) seems to me, that whether I like it or not, there is a moral obligation on me and therefore if I were to be taxed I would not oppose such a tax, but I am not actually voluntarily giving any money to the third world people at all, though I certainly wouldn't

resist a tax, that and luckily as far as I understand it, the United Kingdom and most of the first and second world places do give a bit of money to the third world. I'm glad and as long as they don't make me suffer too much, the more that we help the third world the better. If assistance to the third world throws the Lancashire miners into total misery, then all that's doing is to make someone in the third world more happy and make someone in the first world very unhappy, in which case, there is no net gain in human joy, so I'm not in favour of that, I want a net gain in joy to happen - the joy of living. And how to do that? (I haven't given it much thought). I do think it's extremely hard to be happy, but I think it's pretty unambiguous that illness or its opposite good health; that good health is bad and illness is very bad, so whilst I wouldn't want most of the people in the third world to start building industries or to start changing their societies very much, I would wish measures to be taken for them to have health and, as part of health, to have adequate food and I can see no reason for them... I don't think they need motor cars um... in order to have health they mustn't freeze to death obviously um... so I don't want the third world to start aping to mirroring the problems that we have here in this world um.. as a university academic I'm meant to be pretty happy, so it irritates the hear out of me when some lorry driver without a PhD is even more happy. I mean, what else was my PhD for and not doing anything for the third world than he is, in fact he may be doing more if he is taking goods so I mean, so he could be more moral. So it's a complicated question. Um.. and I tend to boil it down to pretty basic essentials because it is

not clear to me as to how to achieve fulfilment in life and um.... that's what I think living is about, and I don't think the first world have much to teach the third world and if the third world think they have, they had better think again. Because if I look about and see all this violence on T.V., in the third world they have much less violence on T.V. by the simple expedient of having less T.V. I could certainly talk about what an evil thing television is, how it makes for a vicarious way of living. Now, if you were to ask me whether T.V. was itself a violence to human beings, I could probably well answer yes. But, it's very addictive, like other drugs. My brother was actually involved in the study of whether to bring modern western medicine up into this particular desert community. Some real disadvantages to doing so because um... you make them dependent on the whole artificial make then dependent on a whole new load of chemicals.

Interviewer

Yes, and to a certain extent relief organisations like, is it like Tear Fund? And maybe other things like Oxfam um... I'm not too sure about them, but Tear Fund for example : send money out to under development countries in order for miners and engineers etc., to teach people there how to drill wells, drill for oil etc., um... couldn't that be raising false hopes if the oil supplies seize up within a few years?..... Or is that something different to your brother thinking about whether to introduce drug technology in that particular.....

Adrian

Along with that would come... along with my brother's one comes a shift in the religious structures, a shift in relationship

to health and also in relationship to dying, death is something that is unnatural and to be fought, and put off.

Interviewer

That's how you view it personally?

Adrian

No, that's the first world's attitude to death. It's very opposed to death, most first world people fear their own dying and oppose it very strenuously, third world people are more accepting of the inevitability of it and oppose it..... it still is painful to die but they oppose it less, or they put less and less struggles into opposing it as I see it.

Interviewer

What do you mean painful to die? Painful emotionally? Um.. is the emotional or mental adaptation to the fact that they are going to die at some time?

Adrian

I think they are more accepting of... I think the third world attitude towards death and dying is healthier than ours; I remember somebody saying that death and dying is about the only taboo we have left in the west, sex is certainly not a taboo. I remember someone else saying about the third world's fear and the taboos linked still to procreation because it's such a hard thing to be alive and the first world's taboo is linked to death because it is so hard to leave it, it's ... We have actually got it quite enjoyable here. Living is quite an enjoyable experience on the whole and according to this, this is the common vis-a-vis like Buddhism, where it's an East-West type of comment. Do you understand what I'm saying?

It's a very interesting... I forget how we got on to all this.
What was your question?

Interviewer

Around um. centering around relief organisations like Tear Fund sending out money to under developed countries, in order to teach them for example: how to drill oil, or to drill for oil, whether that is raising false hopes.

Adrian

I would say it's not raising false hopes because they can keep on drilling and then the things dry up. I would certainly always watch our motives, but there's nothing that wrong with being selfish, I suspect that we developed the third world in order to provide a market for the first and second worlds. But that's why all this is pretty important; to make sure that, along with providing a market for our goods, that the third world don't lose the assets that they currently have and the joys and fulfilments they have and they don't acquire I mean - when the English invaded North American and spread disease to the North Americans to help wipe them out. I even gather someone told me that we even shipped out smallpox infected blankets and sold them! The English Christians sold smallpox infected blankets - cheap I expect, but not very cheap, simply to kill them, that's quite a nice thing for missionaries and merchants to have done. So the motives of the first world towards the third world (because the North American indians were certainly third world at that time, I'm speaking of the 1800's) basically stink. I should think that the third world should watch the first world, and anything that the first world does, with every bit as much suspicion as a mongoose watches

a viper. But I think, also I think that the third world have got quite a lot of sun and since I rather worship the sun, I'm not absolutely sure which is the third world and which is the first world. But, and that's why I switched over to where there is starvation and blindness and illness, those are my... my third world definition is: people in pain; that's my definition of the third world, those are the constituents that I care for, I don't care about their geography at all, I don't care about their religion nor their social structure - I care about their experience, and if it is one of pain and suffering, then they are the third world and it is they whom I care about, and if they're in Lancashire or in Equador or in Ethiopia, fine, they need to be cared for, and if their pain then is less than mine then, and if money would help them, if their pain is more than mine and if money would help them then tax me, and I would spread that way of thinking to others. I would say tax them as well. Tax the happy to help the unhappy, that's my attitude, it's not geographical, but that is not an easy, what I said is not easy politically to implement, but it can be. So I'm basically fairly socialist in a concern for my fellow man.

HUNGER- STRIKERS

Interviewer

Right, talking about Northern Ireland now, I expect you've read that for some time there have been various prisoners on hunger strike in the Maze prison in Belfast, do you think these prisoners should be given political status?

Adrian

No, I certainly don't. I dislike the hunger strike immensely....

No, I.....

Interviewer

You wouldn't say they are prisoners of conscience?

Adrian

No, no, no, I certainly wouldn't, I would say they were nationalist fanatics, I think they are being immensely violent to themselves, I think they are doing the most unnatural act. I'm sure that their act is um... is and should be condemned by the Catholic Church, the Catholic Church is being bloody sleepy in its way. Because Catholics do not approve of suicide and these people are killing themselves and what the hell the Catholic Church means by condoning it, because by and large it seems to be condoning it, and after all these people are meant to be Catholics, they have a right to live and they should allow themselves a right to live. I think it's a most disgusting form of political um... expression. I dislike the hunger strikes, I dislike intensely the organisers of it, I disliked Ghandi pretty much, but I still think that the Ghandi approach to political change is preferable to a hunger strike approach to political change, so I would have massive civil disobedience if I were trying to effect a change. That does not mean to say that if I were a cool and quiet political assessor, that I would assess this as a non-effective mechanism. I think it is a very inhuman mechanism. I think it might be quite fun if I was a Machiaveli to um.. start pouring gasoline or petrol over individuals and saying: 'We'll set one of our friends alight every day until you change in public at a specified time: come and watch', since I would hate to be the person who is being

burned it seems a disgusting behaviour. Because these guys are essentially being set alight very, very gradually, they're being burnt to death, but they are being burnt to death by starvation, I think it's about the most inhuman piece of political struggle that I have seen and I wouldn't particularly trust the powers behind the powers. I can see these guys, these guys could be pawns. The Bobby Sands of this world. Yes they are... They believe in it, I don't deny that. When you say 'are they prisoners of conscience?' I call them fanatics. They have imprisoned themselves in their own conscience, they have a great deal more courage than I have, to have an amazing will, totally amazing and impressive. It's a very impressive achievement. Would I give them political status? No, I would not. Absolutely not. Why not?... I'm so unpolitical. I mean, it's hard for me to know whom I dislike more. Whether I dislike the Protestants in the North, or the Catholics. And if it's hard for me to know whom I dislike more, it's harder. Certainly, I don't like the Protestants. Don't start getting me wrong and think I like them. I don't like the Catholics and I don't like the Protestants, and I don't dislike either, you know. They're just human beings who seem to me to be behaving extremely cruelly to each other, extremely violently to each other, extremely inhumanely. I do believe that the Protestant majority in Northern Ireland have been mistreating the Catholic minority - I recall (and since it's come into my head I will tell you), I recall when like the morrocans or the Algerians, let's say the Algerians - Algerie Francaise. I ean, Algeria was metropolitan France then Algeria became independent, I remember vividly the image of this Frenchman

who was a baker, who baked bread, who was born in Algeria, whose family had lived there for hundreds of years, he was white of course, because he was French as opposed to Algerian. Just the village baker who baked a good bun, anyway when freedom came, the Algerian nationalists put him into his own oven and baked him.

Interviewer

Really!

Adrian

Um.. I can't quite see why, I mean, the guy was born there and he made an honest living as anybody, just made bread, the Algerians bought it whether they were black or white or green. He was just a baker, but somehow.... anyway you can see where that.... I mean in that case we've got a while so called minority ruling a black (in this case Algeria so it's not black it's arab), white minority and a black... I mean, human beings can be amazingly cruel to each other I am saying, and if I were pushed into a corner I would... no I don't think I could easily be pushed into a corner, I was going to say that if I was pushed into a corner I think I am pretty prejudiced against the Northern Ireland Protestants, being partly Scottish myself and I think they can be a pretty bleak and dour and unforgiving lot and very upright. The Catholics remind me more of the Malaysians - a pretty useless lot of sods, drinking themselves to death and do fuck all. So, given those two sets of prejudices (Laughter) I would have thought that unprejudiced man has done.... I would have thought that probably the Catholics were in the right in the same way that um.... but I mean what a pathetic thing to fight over; Catholic versus

Protestant, it's probably not actually, it's probably a racist conflict, it's probably some kind of a Celt versus some different kind of a Celt.

Interviewer

It's very difficult to get to the bottom of that.....

Adrian

I find it very difficult, um... because the Scots are a funny old lot and I presume it's mostly the Protestants of Scottish extraction, I don't know, I should think it has to be an enmity that's been carefully nurtured for a long long time. It is true that once upon a time the English invaded Ireland and ruled and subjugated the peasants and all that lot and I can believe that that was about as unfair as the English invading India and subjugating the Indians and on the whole, I suppose, that is why I would say that if Britain gave India freedom then Britain should give the Irish freedom. Well, we gave them Southern Ireland and on the whole I suppose we should give them Northern Ireland, maybe this is where my story about the baker who was born in Algeria comes in. Because those poor bloody Protestants were born in that part I don't see why they don't belong there, I think they've got a right to be there. I think that if you're born in a country, or have been there for a few generations, like I would say, the same with the Americans. I don't think an American, just because he was born in America, needs to be thrown out of America just because some North American Indian says: 'Hey you guys, you're all the recent comers, get the fuck out of here'. I think, after a certain length of time, you do establish what is called birthright, certainly the Algerians didn't recognise

it, so those are my thoughts on Northern Ireland and... which again are very reasonable but they don't lead to any political solution. They're just immensely human and immediate solutions, I would suggest. I suppose if I wanted solutions I would want to preach and teach structure things in such a way that human beings managed to see each other as human beings, and if... I suppose I might almost.... I would um... you see it's too late to ban all religion - God how I hate Christianity in some ways, if indeed we are to blame Christianity for Protestant and Catholics. I was thinking of bussing the Protestants like we bussed the blacks into white areas, we bus the Protestants into Catholic areas and slowly integrate. Yes, I have no easy solutions I....man's inhumanity to man, man's distrust and all those lot just are so deep rooted. um... at this moment I do absolutely not watch stuff about Northern Ireland on T.V. I find the subject totally depressing because I see two utterly intransigent, un-understanding, cruel and hateful people just hating each other an um... I just ... I try not to think about it. I see much more hope in Poland, where I see some struggle, I greatly admire when the woman - yeh I'll give women and I don't often give women much with my mentality. I would give the women in Northern Ireland the greatest praise. I think if there's I think I'd give up on every Northern Irish man, I think I would, yes how about this, I think I would take away the vote from all Northern Irish males (Laughter) Yes, yes good idea, take the vote from all males for the next twenty five years and give it to the women. The women have done more for peace and humanity there than anyone else has, that's for damn sure, and the women

have been attempting to remind the hunger strikers that actually they are human.

Interviewer That's true, yes.

Adrian But also we had those women who in fact got the Nobel Peace Prize, that took courage.

Interviewer Mother Therese and...

Adrian No, not Mother Therese! Those two ordinary old Catholic women. They actually.... you know, like one of them was Protestant and one of them was Catholic as it were. They said: 'Look, for Christ's sake remember we are human beings, the men have forgotten this'. Men can easily forget that. Thank God for the women because.... Yes. So there's a little piece of praise.

Interviewer Thanks Ad'n, I'll start another tape.

HOBBIES Have you any hobbies Ad'n or pastimes which you indulge in outside of the Open University?

Adrian Hobbies or pastimes which I indulge in outside..... Almost by definition I'm not meant to indulge in a hobby or pastime in the Open University.

Interviewer Unless your Open University work is your hobby.

Adrian Which I happen to get paid for.....

Interviewer I'm making the assumption that it is not, although in my case my hobby is general research I suppose, because I don't get paid very much, I'm in a slightly different position to you.

Adrian But it also could be working towards a meal ticket that will get you.....

Interviewer Yes, I hope so.

Adrian I'm certainly interested in the development of individual human beings and in the sense that career guidance is concerned with that, there's a genuine involvement of myself in my work with the O.U., so that if that were the definition of a hobby..... So I'm saying that depending on what you want to define as a hobby - um... we've got to be a bit cautious, if you.... 'cos there's an involvement of myself in my work, so for me a definition of a hobby, in answer to this question, is going to relate to activities that I do which I'm not paid, it's going to be hard... the activities that I do that I'm not paid are sociable activities of spending time and caring, and touching and being with other human beings, tending to do that in fairly intimate ways and gardening and little bit of sailing, um.... I do quite a lot of introspection which is not a pleasure pastime, but I certainly do it.

Interviewer It can be quite agonising can't it?

Adrian Yes. I've been meaning to try to keep a document that would try to plot the hours spent in a day over several weeks on what I do, and I haven't gotten around to doing that, I spend quite a bit of time sleeping, which is certainly an important pastime for me.

Interviewer What, more than six hours or eight hours?

Adrian Yes, closer to eight and if I don't get that, then I really need it, and I just would have to catch it up. I don't spend a lot of time cooking but I do cook in order to make food that is sufficiently interesting to eat. I don't do a lot of gardening, I sometimes do wonder where my time goes. I do fringe activities like this current activity that I am engaging in now with you on this tape - that is talking. That is not quite socialising, it's not quite work, it's something, um... I spend quite a bit of time cleaning and maintaining my house, which is a big house which I live in by myself.

Interviewer Are you totally by yourself?

Adrian Yes, totally by myself, and I dislike that intensely.

Interviewer Well, I wasn't sure if um... now I've forgotten her name.

Adrian Alida, no she's not, she's in London so.... but I saw her on Sunday afternoon. I read a little, I watch T.V. mostly to deal

with loneliness and escape. um ... I find it very difficult to ... get advanced to my living when my social life is unsatisfying or unstable and so I um... I don't really know what more to say.

Interviewer

Does religion play any part in your life?

Adrian

I am not allowing it to play much part in my life, um... but I think that if I'm going to get out of the situation that I'm in, I think it may need to, 'cos I would have thought that religion and by religion I mean..... meditation and rejoicing in God's creation and what He has given to me, would make me see what I have in a more positive and an accepting and joyful way, and it is from that that I would acquire the strength to move forward, but at this moment I haven't.... religion is not playing a big part in my life, I would say I was just stewing in my own juice at this moment.

Interviewer

I had a feeling in the past that your religion, or not necessarily a christian religion, was quite important to you.

Adrian

Um... certainly wouldn't ... I wouldn't be without it, I don't want to.... religion is not a crutch in my opinion, so I don't want to turn to it at this difficult time.

Interviewer

Yet, on the other hand, couldn't you work out your (problem is not exactly the right word) difficulties by employing various religious techniques? Whether it be meditation, or praying, or whatever is relevant to the particular religion that you are pursuing?

Adrian

In order that you've got to be sufficiently positive towards yourself, that's to want to do that, and if you're into a slightly self-destructive streak.... but, yes, I think meditation would be very helpful.

Interviewer

Because, in a way, introspection is quite destructive and it is pretty nasty when you see yourself for what you really are. It can be quite terrifying. It's a question of the degree, the depth one goes.

Adrian

Yes, it is quite terrifying and I think I am quite terrified and so there we are - I am quite terrified. I still think it's worth... but you're right if all I do is to then keep on being introspective and keep on trying to terrify myself and keep on and on and on. Whether you kept on and on and on masturbating, or kept on and on and on torturing yourself, all those things kept on and on and on are not much help. So keeping on and on and on in introspection, if it just keep on and on and on being terrifying, it is not going to get you anywhere. So I then say: 'Alan, stop introspection'

Interviewer

One could act on various things which one has found out about oneself, using introspective methods, and take one particular thing and work on that and try and work it out.

Adrian

What I'm currently doing is to take twenty things, work on all of them at one and thereby get nowhere, that's what I'm currently doing.

Interviewer I think I was in the same position some time ago as you're actually in. But I found that I got very frustrated when I worked on them all at once, got into a hopeless muddle.

Adrian And you've now got a little bit out of that position by working on one at a time.

Interviewer That's right, slowly and quietly, which is not me at all, because.... it might be me now, but ... where are we, September maybe up until Christmas that certainly wasn't me. I'd be very hasty and want very um... quick solutions to problems.

Adrian Well done, right. That's nice to hear and helpful.

Interviewer So whom am I to give you advice?

Adrian No, who better than someone who has been through some of the same, same pattern, gosh one does want quick solutions.

Interviewer Yes, but often the quick solutions are not necessarily the best ones, or they might not be solutions at all, just answers at that particular moment in time... certainly I was wondering if you had any pastime which you..... which really turned you on and that you would really like doing or being involved in, apart from your work at the O.U.

Adrian The only real pastime that I enjoy is loving people who love me, but I don't think I'm doing enough of that steadily. I'm doing some of that unsteadily, but that's about... what seems

to me... i.e. sharing, and finding it very difficult not sharing, and um.... if I'm finding it very difficult not sharing, I'm not trying to... I'm not rushing into finding substitutes, I'm trying not to rush into substitutes, because....

Interviewer It could be forms of escape.

Adrian Yes, they could be forms of keeping yourself busy and avoiding the paid and avoiding trying to find a solution to it, and some.... like if you've got, got a stone in your shoe, well, if you put enough pain on your thumb maybe you will forget the pain in the stone in your shoe, but that's not much of a solution, and um... I mean just wait until, I mean I have enough, I have at this moment beds made up that could sleep sixteen people.

Interviewer Sixteen!

Adrian Yes, and I'm sleeping alone in my house, there has to be something going on in my head that makes me want so many beds - want so many beds too, that isn't just.....

Interviewer Not sixteen beds, just sixteen sleeping places.

Adrian I could sleep sixteen people, some of them would be two in a bed, I forget the number of beds, I could work it out, but it's certainly a lot of beds, probably ten beds and I'm allowing nobody else to share the house, nobody else to share it, it's a funny business.

Interviewer It's quite a change, if I may say so, isn't it from.....

Adrian Yes, I used to share. Yes, yes, it's an enormous change.

Interviewer About eighteen months or so ago.....

Adrian And it's a change from five years ago when I shared it with a man and a wife and a child, or when I shared it with three adults - a couple and another friends, or when I shared it with one other girl and the dog and um,... what I am missing really is the act of sharing it with one other human being. I don't want tenants really, I actually don't want them, that's why. I sometimes wonder about some kind of a community.

Interviewer I was just going to suggest that actually.

Adrian Some kind of a genuine communal sharing, but I don't want tenants, 'cos if it is the sharing and the loving that I'm wanting as my favourite pastime and by that I include sharing responsibility. So those are my pastimes and I think that's about enough on my pastimes.

ADVICE TO SOMEONE GETTING MARRIED

Interviewer That's super, thanks Ad'n. Right, the next topic, I was going to task you for your views on would you have any advice for somebody getting married?

Adrian

Do they want to? Would be one of the questions. I certainly think about getting married - quite seriously I think about getting married, and I sometimes think that the only way that I could get myself married would be by some instantaneous leap. So advice about.... to somebody might, in that context, be don't think about it too much or you'll only get terrified! The advice is therefore, advice based on what little experience I have.... advice to people getting married....

Interviewer

Maybe you wouldn't want to give them any advice at all.

Adrian

If they were feeling joyful and happy then I would be delighted to share their joy and happiness, I probably wouldn't want to give them that much advice, I would want... But what if I thought they were very unsuitable..... If I thought they were very unsuitable.... I might advocate living together, I would certainly draw a vague distinction, well I would draw a distinction (but if it's not a big one) between marriage and living together. Marriage does have two aspects to it, one is a certain kind of an ongoing commitment over time, which is what I find so difficult, but the second thing that I find difficult about it is that it's a social contract with legal consequences. I remember one of our regional directors who married his secretary and only when they were getting divorced did he find that his little country house which he had owned long before they were married, that his secretary had, without him knowing, had put a leaner on the house that forbade him to sell it, he didn't even know, so that the capacity to be double crossed is enormous. So, I personally have a

considerable paranoia towards wives. i.e. the main aim of a marriage is to screw (by that I mean not physically, but financially and other ways) the husband. Um... Also, the religious perspective of that tends not to think much of marriage. Tends to praise loving....

Interviewer

What, religion in general?

Adrian

No, no being a SanyasinBhagwan one tends to see too many Indian marriages which are arranged marriages, seen too many women in particular who have been just... whose life development has been held back by pretty ugly marriages.

Interviewer

Is this a form of... is this Buddhism?

Adrian

Yes, and that's speaking very crudely that its a form of Buddhism. Buddha is a great teacher in Bhagwan's opinion, but um... if marriage (what my teacher advocates) is love and loving, and if two people are loving each other than, of course they would enjoy living together and being together and spending time, and sharing time with lots of other human beings and loving which has nothing (according to him) in connection with marriage which is a total, which is an ent.... which is a contract defined for totally different reasons. Bhagwan's solutions to loving and child bearing is more communal living arrangements but not necessarily marriage. Marriage is necessary in this analysis because of nuclear family structures, not communal family structures; communal family structures means that there are children and if the mother

and father of that child have ceased long ago to love each other, then that child is cared for by those who still love it, which may well be the mother and may also be the father, thought the father is now loving someone else and the mother is doing something totally different. Bhagwan wants loving to happen, and while Bhagwan sees marriage quite often as continuing long after love has died.

Interviewer

Oh I see, yes.

Adrian

And, as it were, they stay together because of the children and he doesn't want that to happen, he thinks that's a poor use of marriage, but it's a nice social contract and a social bind that put people into it, so it's...dead. but um... So I mean, these perspectives, people might well be aware of, if they were getting married, I would expect them to be aware of them anyway. If there were unspoken reasons behind the will to get married, I think those should be spoken about, so I would advocate that the wife and the husband prospective should be honest to each other as to what they are trying to get out of marriage, um... so that would be about the best advice I would, so the advice I would give them is - forget about marriage and keep on loving. If that seems nice and stable and they want to get married, then get married, but within the context of the loving I would expect a great deal of sharing, and the sharing of the reasons for wanting to get married and um..... and when it came to the end of it, I would say "it's not rational to get married, at some stage you've

got to make a leap in faith, that you can't sort of.... advice is beside the point, it's a faith that something good will come.

MY JOB

Interviewer O.K. thanks Ad'n, I'll just turn the tape over now. Right, Ad'n, what do you see your job involves you in at the Open University, and by that I don't just mean job specification, what do you feel is your work here?

Adrian I find myself saying recently that I still believe in the Open University and in people's capacity to change and to develop and live more fulfilled lives. I can conceive of the idea of living more fully and living less fully, and that's.... you know... some other words might be more self-actualised or less on self-realisation and stuff. Certainly my efforts are aimed at trying to (as with other people in the O.U.) aimed at trying to maximise people's, our students in particular, chances and opportunities to do what they want to do, so I'm, I feel as if my shoulder is to the wheel of a very big sort of cart, just generally trying to help it in the right direction. It comes into my mind, the image of a tribe who pray regularly in the evening and particularly in the morning before the sunrise, in order that the sun may come up and that if they don't pray it won't come up. That's probably the same reason that I work at the O.U. - that if I don't work at the O.U. people will have less fulfilled lives. It's a job, I get paid, which does

pay for my mortgage and the beautiful, though isolated house in which I live.

Interviewer But that's why it's beautiful.

Adrian Because it's isolated?

Interviewer That's right, yes.

Adrian Yes - that's interesting that you say that, yes there is a component in which, certainly, the geographical beauty is....

Interviewer For example, the houses up here, the sort of building that has gone on in Milton Keynes terrifies me, and appals me. I just couldn't live in those little ticky tacky boxes.

Adrian I've been thinking about trying to sell my house and live in a ticky tacky box, thinking that I put too much of myself into my houses and that, as it were, a real human being can find fulfilment independent of his environment. I seem to be very dependent on my environment..

Interviewer No. I think you've got to be at one with your environment um... it would be quite a step to leave your farmhouse for a ticky tacky box up in Milton Keynes and one would have to work at another problem of becoming at one with that.

Adrian I'm certainly quite at one with my little house, but it is isolated, I like some of the people at the O.U. and value them.

Interviewer

You say some, which implies that there are quite a few that you don't know or don't like.

Adrian

No - whom I don't know. I don't think I, I.. there's very few of them I don't like, there's quite a lot whom I don't know. There's an enormous number. No, I think they're um.....

Interviewer

But first it is a question of getting to know a person anyway, and depth to which you are going to know them, or end up knowing them and thirdly can you eve know somebody completely?

Adrian

I think if I would... if knowing somebody completely means also swallowing them up and digesting them and so on, and if that be the aim of marriage, one can understand why I fear marriage, because I suspect that I do aim to know somebody completely, but I suspect that also I expect to be totally known, i.e. it is reciprocal, but I suspect that along with that has gone somewhere a quite proper fear of swallowed and being swallowed, swallowing and swallowed, if you follow what i mean.

Interviewer

It's a case of to be understood as to understand.

Adrian

Yeh, yeh sharing. Maybe there's only that much life energy that you can only do it with so many people, but I can't love everybody at the O.U. and understand them all and share with them all, even though one might like....

Interviewer

It depends on the degree of love actually, or what you mean by love in the first instance, but I'm sure that you can love human beings simply because they are human beings on that sort of level. Obviously there are other shades of love, but getting to know somebody obviously has to be worked at, although I don't quite mean that... and loving their faults and failings as well as things which you really like in them.

Adrian

Yes, yes I would say I don't do anywhere near enough loving within the context of my work at the O.U. I find myself isolated at the O.U. and withdrawn at the O.U: more so than is absolutely necessary.

Interviewer

Yet on the other hand.....

Adrian

I do it myself, it is not done to me, I am the cause of it.

Interviewer

Yes, you choose that.

Adrian

No, I don't choose it, I happen to do it, I wouldn't say that I choose it, it's that if you lack confidence and you withdraw, do you choose to withdraw? Yes, I suppose you do because, in that sense, you are always responsible, but, did you choose to lack confidence? No, you didn't choose to, you just simply do lack confidence and so you do withdraw, it's in that sense that I don't choose.

Interviewer

But as a counsellor I would have thought you would have had a fair bit of contact with students.

Adrian

None, none, none, none, not at Walton Hall. That's an exaggeration for me to say none, but essentially the contact my students are: in the first instance the full-time regional staff and in the second instance the part-time regional staff but in the third instance the O.U. students - I'm three levels removed, if by a student you mean someone who is, who we are trying to provide career guidance for, I don't do much career guidance of individual staff here at the O.U. I have on occasion but not recently. I've toyed with actually doing more career guidance here in Milton Keynes as part of the Open University's outreach to its local environment, I think I would be supported, if I were to do that, by my department.

Interviewer

So 'counsellor' is a little bit of a mis-nomer?

Adrian

A better word would be a trainer in counselling, and in this case, or a trainer of trainers because the senior counsellors are also trainers of the part-time staff; part-time staff are the so called counsellors, but they're not counsellors, they're tutor counsellors, most of them don't like counselling they prefer tutoring, because who has ever heard of an academic that enjoys listening - only poor little research students who will one day become academics and then lecture on listening. (Laughter) No listening is not an easy skill, nor is trying to help poeple's career development when you don't know the solution, but I believe that you can help, I think you can help people to find the solutions even though neither the counsellor or the client knows the answer. But I think you can help people to find the solutions even though neither the counsellor

or the client knows the answer. But I think that two heads are better than one and you see the avenues forward, rather like you and I were talking about ways in which we could make my present living style more joyful. I think two heads exploring that, caringly is better than one head introspecting on it. So I'm trying to get the tutor counsellors first to stimulate the students, well, really into sharing the introspection of the student with regard to why are they studying with the O.U. and where is it going. I'm not concerned with that aspect of the tutor counsellor's work which is concerned with the student's effort to pass the course and concerned with the planning of what other courses, but chiefly the context of why study at all? Why the O.U.? Where is this all..... or what's this... where is all this happening? And it's that diffuse dimension that I mention, that is the sphere of work that I'm concerned with, and in particular with the production of a series of leaflets and printed materials that relate to the guidance of enquiries to the O.U., relate to the advice of self-awareness of students, a career-life planning work book and world of work that's advice for disabled students. And there is production printed materials, some efforts of training of the staff and production of materials to help the part-time staff, help students use self-help materials, in the theory self-help materials should be self-help, in practice they probably aren't. I think I'm trying to produce an analogue, in careers education terms, of central faculty materials which are concerned with whatever educational academic subject they're concerned with. The academic subject that I'm concerned with is not education, it's not mathematics, it's not

social science, it's careers education, and I'm not treating it as a subject in the way that the education faculty might treat further education as a subject, careers education is an experience in the same way that maths is an experience, studying maths isn't looking at maths, it's being able to do mathematics, studying careers education isn't studying careers education, it's being able to make career decisions wisely, that's what the outcome skill is and that's my job.

Interviewer Self-fulfilment.

Adrian Aids to self-fulfilment, but a particular category of aids, because learning, doing M202 is an aid to self-fulfilment if skills in M202 are what will fulfill you. Mine is kind of meta to that, it's almost like meta-physics. It is trying to help you know what will fulfill yourself, what are your values, what are the things that you want, where is your fulfilment likely to lie. These are the questions that I want students to ask themselves and I want counsellors to help them answer.

TOPICS IN THE NEWS

Interviewer Right, reverting back to topics in the news, how interested would you say you are in topics in the news and world affairs?

Adrian Interested in the strength of the pound because I owe money to someone in America, so I really follow that quite closely,

because I owe them some money quite urgently and I need to know the best time to send it. Poland - if I were to hear Maggies Thatcher on the T.V. I would either treat it like I do the adverts on the I.T.V. which is to switch off the sound, or go get a coffee, or if I wanted to give myself a piece of exquisite pain, I may well listen to her amazing voice, I mean her main.... it is a particualr form of masochism. I would be concerned with threats to the environment, I'm not very concerned with whether Choo Choo did... I'm glad she's pregnant and I hope she is well, this is the giant panda....

Interviewer (Laughing) Yes, I know.

Adrian Other job advertisements I never look at, I do look at what's on T.V. just to see whether there's anything that might interest me, I eat my supper by it. I do read editorials, without doubt the best thing that I've read recently is a little article which I would be happy to actually photo-copy for you, brilliant little article by George Steiner commenting on what it is like behind the scenes at the Korchmoi - Carpoy chess match, brilliant little review, most deeply pleasing to me.

Interviewer That would be very nice if you could do that.

Adrian I was just moved by it. Um ... that was in a Saturday review, I think it was probably 'The Times'.

Interviewer I actually only have 'The Observer', on a Sunday.

Adrian I've not yet, I've ordered my 'Observer' but I haven't yet had time to pick it up, I'm leading such a busy life.

Interviewer (Laughing) Thirty-five pence.

Adrian Yes, but it is paid for, it is paid for, um Poland, yes that would catch my eye; Benn against Healey! I am pro-Social Democrat and would hope the Social Democrats and the Liberals will get together because I am pro what I think would be fun to have (at least for a while) a unification party in the middle, so that the more than Benn would cause chaos to the Labour ranks, the happier I was, because I think he would cause chaos. I generally would read a little about Benn. I did read a little article about whether Dodgson alias Lewis Carroll proposed to Alice Liddell, rottenly written but an interesting piece, rottently, written.

I do read a quick glance at the editorials, I mostly don't read the newspapers because I think mostly they are pretty boring, um. . . violence on T.V. may be certainly secondary to bad news in the newspapers, the quantity of boring bad news that gets dished up as news in the newspapers, far exceeds what goes on on the T.V. I don't say it's bor. . . it's violence, I just say it's long stories about the murder of someone, or the crash of someone, as if that's news. It's one poor human being suffering, it's not exactly news.

Interviewer Would you say that you're well informed?

Adrian I would say I was appallingly informed.

Interviewer Go on, yes.

Adrian Quite appallingly informed, and I see . . . I'm not convinced that I need to be ashamed of it. Not convinced that I need to be ashamed of it, because as is evidenced by this long tape, information is not going to have much bearing upon any of my proposed solutions. I mean, giving me better . . . 'Mastermind' would be the absolute end as far as T.V. goes for me. And I absolutely never watch it. I am, I am intrigued by such human beings quite a little bit that they do know when some composer, who died in 1920, who lived in France and was born in Japan and they get it right - Coates, I heard it last night - amazing. I can see no purpose to that piece of knowledge.

Interviewer I know, I share the same sentiments actually.

Adrian So that my effort would go towards either gardening or towards loving or towards praying. I would certainly sooner meditate than fill my poor head with encyclopaedic knowledge that's much best left in the encyclopaedia. I am well informed, I believe, on the derivation of words and in etymology, that intrigues me. So I can certainly, and I've recently been, going on at great length to people about the implications of the meaning of the word 'Christ'

Interviewer Really!

Adrian Yes, and anointing, yes.

Interviewer And anointing?

Adrian Yes.

Interviewer Why these two words?

Adrian Because that is what Christ means - the Anointed One; whereas Buddha you see is not anointed, in order to be anointed someone's got to anoint you which is outer directive religion, whereas Buddha is inner directive religion - fascinating difference, no one anointed Buddha, Buddha's not 'The Christ' Buddha is not inner tradition, Buddha relates as does my teacher, my teacher is not anointed, they're both self-anointed, enlightened. Their enlightenment isn't, or their status isn't given. Anyway, that's an example of something that I'm well informed on, so I'm not ignorant, because to call me ignorant would offend me. I'm not ignorant and I think I would say I was not ignorant because I'm thoughtful, but if ignorance were defined in terms of 'Mastermind' sort of definitions - then I'm amazingly ignorant. I do remember (since I did go to all the good schools), I do remember learning off all the states in America and all their capitals like Albany, not New York City, much more interesting city then, but I know Albany. So I know all that, and somehow I seem to have rebelled against that as being well informed. Yes, it is educated since I went

to, as I say, the best schools. So your question was: 'Am I well informed? And the answer is: 'No, I'm afraid I'm not well informed'. But I'm . . . I hope I'm not ignorant. But I'd hope even more that I was caring.

Interviewer

Yeh, and loving?

Adrian

And loving. Those would be . . . those would have a much greater priority than informing. You see I'm not an information giver, I'm a counsellor so if I were a lecturer full of . . and if I saw lecturing as information giving, then yes, I might be better informed. But I'm actually a counsellor. I'm trying to help people elicit clarity in their lives, of which information will play only a relatively small role. I'm concerned with values as well as with information. Yes I am concerned with information, but I don't want to accidentally fill myself with trivial information, in case it took so much of my time acquiring and holding that information that I then forgot about values, and forgot about physical health, and forgot about some of the other um . . items of living which take an edge even. So I wouldn't want to be on record as being proud about being ill informed. So I sort of sounded as if at one point I was anti-information. I am a bit anti-trivial information, I certainly don't want my brain to stock what should be stocked elsewhere - like in a telephone book, I want to care about my life.

Interviewer

Right, thanks very much then Ad'n."

and if things are getting out of control at home (yeh we can have more law and order there but that's hard to do). So I thought that Reagan might conceivably say 'things sure as hell won't get out of order in the rest of the world. Russia bloody well will not do what I don't want her to do, or I shall pull that fucking button and blow them all up'. It would have been the sort of response of a man who has been severely and personally hurt by the wanton act of the bullet of some.... I mean it would have ... it's that sort of accident it seemed to me that could create a third world war.

Interviewer

Yes, being pushed to one's limits.

Adrian

Well the guy - Reagan was shot without any cause, he's an old man it must have hurt a great deal. How can this mindless pain that he has been caused to suffer, how can we get back at the unruly world for doing it. It would be some idiot like thing that cracked him (I see) so I certainly very much wish to see Polish workers well. I was also moved in that same film suddenly to see (by the same film I mean the Polish film).....

Interviewer

Yes what was this called by the way?

Adrian

I don't remember but, it would not be difficult to trace, there was a series of, it was a kind of week long thing, I thought it was going to be, ... but I mean anyone who is concerned with B.B.C. or Poland would be able to tell you, it's famous, important Polish documentary which was almost totally non-edited and.....

TRANSCRIPT 2Interview with ArthurNDVIEWER

Right then Arthur, what do you think about the present situation in Poland?

ir

Well I know very little about it. I have been to Poland and know lots of Polish geographers and so I, I do catch up with the news a little. um.. when you ask a question as um.. as general as that, one is apt to have a very general reaction saying that perhaps the um.. the trade union activities look as if they were promoting a somewhat um.. free-er, more humane sort of a society and that one just hopes that the Russians don't come and crack the whip too harshly, or too suddenly or too soon, before things have um.. shaken down perhaps to a sort of a reasonable sort of regime in Poland.

VIEWER

Would you see the Russians as a potential sort of threat to Poland?

ir

Oh I think so yes, um and um of course, the Russian behaviour at the time of the destruction of the old Warsaw does not really endear them to the Poles.

VIEWER

What happened then, can you elaborate on that?

ir

Well the Russians more or less stood by, within a few miles while the nazis destroyed the old Warsaw um and this was not taken kindly, so that I think that one has to say that Poland's position in the eastern block countries is a matter of um..

and not a really great yearning for Marxist um Marxism and Leninism, um.. I've no doubt that a lot of things have gone on, really quite well under the um.. under the existing regime. I mean our geographer friends for instance, who've perhaps been more directly concerned in development than have our planner colleagues in this country, um but I think there

is no doubt that it wasn't a matter of choice it was a matter of force.

VIEWER

Yes, do you think that Russia will try and persuade the Poles to come over to their way of thinking with respect to the way they run their government?

ir

Oh I think in a particular sense of the word persuade.

VIEWER

Persuade yes.

ir

You know it's rather um.. it's rather like an Indian village the only one I had been in that had gone collective on the basis of equal shares per family irrespective of family size when I asked what happened if a particular able bodied member of a family was not playing his full part let's say um in the um.. ploughing and the um.. head man said "well we persuade him" so it would be that sort of persuasion I think. Um.. It's not my field, you've got... I mean if you wanted an answer to the question there would be people that you could ask like Paul Lewis, but um..

VIEWER

Who, Paul Lewis?

r

Yes he is the pundit.

VIEWER

He is in your department is he?

r

In the faculty.

VIEWER

In the faculty yes.

c

Um.. you know he is one half of this Soviet Government course, Frank Cassels being the other half, but Paul's area is actually Poland, and he speaks Polish so..

VIEWER

Um.. Have you spoken to your friends that you know here in England who are Poles about the situation.

No my, my geographer friends are in Poland, one of them I have seen in England, not long ago, several of them, I met in Tokyo

oddly enough at the time when the um.. the crisis began about a year ago um.. and at that time they certainly were fairly hopeful that um.. a reasonable modus offendi would come out of the .. the stress.

ENCE ON TELEVISION.

VIEWER

Right changing the subject, have you got any views about violence on television?

ir

Well again its.. it's not my field and there are people who could answer the question better. um.. I incline to the view that it is influential in spreading violence.

VIEWER

Yes, what makes you feel that?

ir

Well if one.. if one takes the post Toxtieth few days, I think that the media had something to do with that, I think that there was a fairly clear pattern of imitation. um.. and.. again it's not my field I haven't been collating evidence but intuitively I would think that it was imitation

VIEWER

Would you say that sports like boxing and fencing, judo, karate etc., could be called fringe violence?

r
-

Boxing I would think so, especially the heavier weights, the lighter weights often seem to be having skilful exchanges without brutality. The others I really don't know enough about them, but I think that it um.. that both of those could be regarded as exchanges of skills without intent to damage in any way.

VIEWER

Would you think that violence in television programmes or as portrayed on the newsreel or in sport is um.. helps or encourages violence in the family? After all a lot of children do watch television.

I don't know. um.. I don't know if that's the way in which it is a bad thing um.. in.. certainly I think that the society is a more violent one than it was a few years ago. um.. violence as in families I'm not sure about um.. especially if one takes a fairly broad definition of violence.

What do you personally mean by it?

Well I think usually one thinks of physical violence, but um.. I, I know that some people regard verbal violence as.. as often as hurtful and I certainly wouldn't like to exclude it. I think um I think that um probably within family violence is often of that character um.. and I you know I have heard people whose marriages have broken up, talking about violence which was really violence of attitude and um.. really cruelty of verbal exchange rather than by physical violence, and I um.. I think it is fair enough. Now whether the television would ferment that, I don't know. um.. it might um.. it might decrease, by um demonstrating that it can be so harmful.

WIND/SOLAR ENERGY

Yes. Right to change to something different, the other week and a fellow crossed the channel using a balloon and solar energy, do you foresee ballooning as a potential source of travel for the future?

It's not the same thing is it? I mean the gentleman with the solar energy was in a little light aeroplane. um.. and ballooning is much more these days very long distance things with the helium pack. No I don't think ballooning as such I mean the dirigible might come back of course and so..

Sorry the which?

The dirigible that is a directable, directable lighter than air craft, might conceivably make a come back. um.. especially if the energy saving by being lighter than air was enough to

be really significant, then the saving of oil or most of our energy for

VIEWER

Yes after all I mean solar energy has been used with respect to solar heating for example in a project up here in Milton Keynes so obviously alternative technologists do see that solar energy has got some use, have you got any views about this?

ir

Oh I think it is some use alright, I mean obviously in some places it has got a great deal of use um.. I wouldn't think that travel was necessarily its um.. it's prime application although even that wouldn't be inconceivable given better batteries for instance.

VIEWER

Better batteries.

ir

Yes well in a sense, lighter in relation to storage yes.. You ask me about all sorts of things...

VIEWER

Yes not related at all.

ir

On the other hand geographers presumably ought to know about um.. quite a wide range of things, or at least know something about general knowledge.

THIRD WORLD

VIEWER

Right Arthur have you got any views about the development of the third world, politically and economically?

ur

Yes, I suppose about twenty years ago I was a kind of a development geographer and so, yes I suppose I have some views um.. again it's a very general formulation, but I suppose that one thing that I would certainly back is the view that western experience would have to be applied with great caution, whether it's done by external agencies or by indigenous people who are just being captivated by the

western techniques. I think that there's lots and lots of evidence to show that one can do more harm than good.

VIEWER

Can you tell us more about this evidence? and what cautions need to be heeded?

I

Um.. well um.. I .. one thing is that there was the phase when all developing countries freed of the colonial yoke and all that, felt that they had to be really very imitative indeed, and they had to have a steel works whether a steel works made sense or not, and I think the evidence is of.. of disruption or of um sharpening of differences between rich and poor, so that the rich on the whole get richer, and the poor get if not poorer then they are only marginally less poor um.. it does seem as if something much more in the way of grass roots improvement in standards of living and health and so on would be much more to the point. It's not easy because on the whole um.. simple people, peasants or whatever you like to call them really want to be left alone, they don't want to be developed thank you very much, and yet there are degrees to which intervention of some kind, you know preferably not from foreigners, really almost has to occur simply because if there ever was a sort of state of equilibrium in which there was a sort of happy well adjusted society in many tropical environments it has long since been upset. So for large portions of the people, health, welfare, infant mortality, maternal mortality and so on are in a deplorable state and nutrition chil mal-nutrition, protein mal-nutrition which effects intelligence and so on are in pretty shocking state.

IEWER

Can you tell me about any of your observations in India? or elsewhere.

Well my, my um.. actual sort of down to earth experience in India is now twenty five years old um.. it was I think along

the lines I've been suggesting, that um that really it was a matter of trying to activate quite local communities to make better use of their environment, their immediate environment by quite simple means, mainly I think by example um.. at that time television let's say or video playback and so on wouldn't I think have been the way to proceed, it may be now. But it would rather be persuading a particular cultivator preferably not too big and rich, to modify his techniques just slightly rather than dramatically, to show what could be done by quite simple means, um and um... the large operator, a man who could afford tractors and so on, would not be helpful because it would be regarded as beyond the means of the small man, um.. it's not to say that everything that was done in India in the name of five year plans and so on was wrong, but certainly I think as the five year periods have succeeded each other one has to say that um.. that the local activation has not really succeeded in pulling up whole communities.

VIEWER

What re-organisation would you see politically?

Well I.. it's a... it's difficult to say, if politics is quite what one is after um.. obviously in the case of India a comparison is often made with China and with um.. a communist government with very strong centre and with the party member in the village commune as an extremely powerful agent of change. um.. and India certainly hasn't had anything like that and I think, no doubt, from the point of view of sheer efficiency that things might have been better in some respects if something like that had prevailed. um.. so you know that would be one way that the country might move, might still move, might move almost any day, and no doubt some things would be better done by a combination of strong centre and local antenna particularly if the feedback is given up, um.. and India did make changes you know, in trying to make land reforms largely and so on and from the

point of view of local government there was an attempt to re-activate the age old village council, the council of five, but on the whole it has not really changed things. The local big boys still dominate and so on.

VIEWER

Yes the local chief is that?

r

Well it would be some sort of combination of um..

VIEWER

That would be in tribal areas I presume?

r

Oh even caste in India often has some sort of head man, and village accountant who, um.. so one needn't think just of tribal India at all. um.. the council of five who would be dominated by the big land owner, the caste Hindus, the money lenders, and they are often the same people and maybe the administrative hierarchy, um.. so that really grass roots participation particularly over into the um... the caste groups, the one should say formally outcast, I suppose the Arijana groups.

VIEWER

The which groups?

r

Arijana was Ghandi's name for them. Heaven born, or something to that implication um.. really it is in many places, very much of a facade. You can abolish untouchability by law, but you can't make people good by law. So I don't think I have any very clear cut ideas um.. beyond the feeling that um.. the unsolved problem is about local groups.

VIEWER

Does the same similar or not the same but a similar situation exist in Africa?

r

I don't really know um.. you know I've stepped foot on the African continent but don't really know it. I know something about Africa because geographers of my generation knew something

about most places, I can't really pretend to be anything like up to date, but I would guess that there is something in common. I think there are common elements across the third world, and I would guess that yes something like that is the unsolved problem and it is the problem in part of sort of internal colonialism if you like, where under whatever political regime the cities and the most developed parts really act like colonial powers in relation to the less developed parts. You know I recall my daughter coming back, my older daughter coming back from two years V.S.O. work in Nigeria and saying "what a shower of racist bastards " they are out there.

VIEWER

How long ago was this?

ur

Oh I suppose it would be seven or eight years ago.

VIEWER

Quite strong feelings.

ur

Yes, yes about you know the settled agriculturist and the nomad and they mostly live in the north and the banana cultivator from the deep south and so on. Really quite um.. quite strong views about barbarians and all the rest of it. So I um.. yes I guess that there's enough in common.

ER STRIKERS

VIEWER

Right, something different - I expect you have read about the hunger strikers on strike in the Maze prison in Belfast, do you think that these people these hunger strikers should be given political status?

ur

Ah no I'm inclined to think not, um.. it's a very, um it's a very difficult one, largely because I think of the fact that you can't put the thing on a kind of war footing because it wouldn't suit the Irish government and there is so much of the problem would be clearer cut, if it wasn't for the fact that the Irish government's own attitudes to the I.R.A. are

so ambivalent...

VIEWER

Yes so ambivalent?

Yes, but um.. I, I think that one can't really see that these are honourable soldiers in the cause as things are.

VIEWER

No I mean quite a few of them are terrorists aren't they in actual fact?

Yes of course, of course yesterday's terrorist is today's Prime Minister as in Israel, or you know Jomo Kenyatta in Kenya and so on. Whether people remain terrorists depends so much on whether they win in the end. Large numbers of terrorists organisations have won and in the last thirty years and have then become respectable. So that one can't be too sure, characteristically I think the Irish situation just is just inordinately messy.

VIEWER

Yes it is, how do you think it got this way?

It's had a long time to do it

VIEWER

Yes it has (laughter)

Yes and I mean the Irish keep changing the question and all that, um.. yes it really is an extraordinarily complex pattern. You find that the people who can see clearly how to solve the problem are always well away from the scene. You know the Danes or something.

VIEWER

And what advice do you think the Danes would give?

Oh they see the thing quite simplistically, that you just... the British just pull out and you just make a united Ireland forthwith. I'm trying to think if the Danes have had any similar problems, I'm sure they must have had some problems with Iceland or Greenland and all that, nothing quite with

the witches brew that Ireland had. Anyway on the original question, I don't think that political status is the right answer.

IES

VIEWER

Right Arthur have you got any hobbies? or pastimes or things that you do when you are not at the Open University, things that really touch you and turn you on.

Um.. a lot of them neglected and you know, retirement is a time when a lot of them might come up again, but um.. yes I walk a lot, I've never been a rock climber, but I do like to go walking and I'm still very active in that, I fish a bit you know, I've fished from boyhood and still do so occasionally um,. I have been a take a fair amount of sport, sort of active team games and so on have long since gone, but I walk and swim and so on, I was a moderate player of the violin, and might come back to that. I used to paint quite a lot when I was in a routine job. I might come back down to that also. So yes I've got a lot of things to turn to um.. and you know, I don't think I'm ever bored in such leisure time that has come to me since I became an academic and I don't expect to be bored in retirement.

IEWER

No, you're saying you might, or hope to take up some of these pastimes when you retire which is about a year?

About a year I should think.

IEWER

Um.. can you outline some of these pastimes which you hope to take up, presumably you fish at the moment do you, and walk?

Well sometimes yes, and I'd like to a little more, Oh just I think more for the pleasure of getting to know different rivers than for the pleasure of killing fish. um.. very often one doesn't kill any fish actually - depends on a lot of variables. Um.. painting, if I succeed in retiring to North Wales I would expect that there would be somethings that would make me want to go back to that, I think since I last did a substantial amount of painting that colour photography has made even an amateur

much more wary of anything photographic and so it's really a matter of seeing whether um.. I can turn to something which carries much stronger elements of design while still representing a landscape, or a landscape with figures or whatever um.. with you know, a feeling for reward and perhaps some pleasure too, for people to look at.

VIEWER

Did you paint in oils or did you use water colours?

r

I have done painting in oils a bit. Water colours mostly, it's difficult to forecast what I might go to, water colours are so much more easy and sensible, cheaper and so on, umm. oils would be a new challenge because if I didn't do enough to matter.

VIEWER

What sort of scenes do you favour? for your pictures.

r

Oh...

VIEWER

Or subjects, not necessarily scenes.

ir

Well so far it certainly has been towards landscapes you know I haven't acquired enough competence with figures, even to put them into landscapes with any confidence, so on the whole they have so far been landscapes as such. I think that one would say that they're often something about seasons for instance.

VIEWER

Oh yes, yes I agree there.

ir

and they needn't... I mean they could be detailed

VIEWER

The autumn I'm particularly keen on.

r

Um.. there's one of my paintings from when I was a bank clerk, that's what I was getting at really, when I was a routine worker and therefore, leisure was different.

VIEWER

It could be more ordered perhaps because you had regular hours?

ir

Yes, yes pretty regular hours, and what's more there was energy to spare. Whereas academia is apt to drain one terribly.

VIEWER

Yes I know I'm learning that, I get dreadfully tired, so I'm sure you did.

ir

So umm.. one surviving picture is simply the trunk of a tree with some ploughed land behind it and there are green shoots showing on the lower twigs of the tree, it's very like a spring in Midlothian there's no question, it carries an atmosphere so I think probably romantic would be perhaps a term of abuse but it's something towards an emotional reaction to the seasons.

VIEWER

Yes, yes. Do umm do the other seasons of winter and summer grab you in quite the same way?

ir

Oh yes, yes I mean I have painted in a snowstorm in water colours and the fact that the water colours tended to run in the snow is just part of it. Oh yes I think so, I think it's um.. I mean considering that I wasn't a geographer at the time, when most of this was done. I think one would say that the tastes are fairly catholic within the landscapes that have that sort of reaction. I'm not as attached to the old country only as one would imagine from my origins, I'm very fond of ~~East~~ Anglia for instance.

VIEWER.

Oh yes. O.K. Arthur I'm just going to turn over the tape. Right to continue our discussion: In a way your enthusiasm for walking and painting and fishing sort of all have inner links don't they? because presumably as you're walking, you are not only walking from A to B you're also looking at the scenery and probably getting some idea of what to paint and possibly taking notes of rivers where you would like to fish or know better.

r

Oh yes, yes I think that sounds fair, yes so I suppose there are in that sense a connection with um.. getting out of Edinburgh into the Pentlands and so on. It's a thing that has just stayed with me. yes..

VIEWER

When did your interest in painting and walking first start, was it when you were in the bank and had more regular hours then, is that when?

r

Painting, I certainly started at school, I was regarded as rather too good academically to concentrate on art, um.. but by a bit of negotiation with even a rigid old Scottish school, I was able to continue with some painting through the more strenuous of schooling until I left, rather early actually. I left school just after my sixteenth birthday. Really because of the slump, and so my not having any school obligations whatever which is my state, wasn't due to being in a low grade form or anything, it was because of the slump and because of the chance of an apprenticeship um.. but you know up to the time that I left, I was getting a sort of unofficial help with painting, by not having bible lessons actually was the device.

VIEWER

By not having bible lessons, so does that mean that you were catholic or protestant or ...

r

No it was quite comic actually, my school is a secondary, an ordinary corporation secondary school, fairly big, Corporation

VIEWER

Yes ordinary local authority school, it was very big even in my day, and it's bigger now and it had quite a large product, now my middle name is Amos and having obtained the exemption it was then after assumed that I was exempt because I was a Jew and shouldn't go to bible lessons for that reason. So it went on for quite some time. At times under a misunderstanding but it was very helpful.

IEWER

(laughing) yes what other pastimes do you hope to take up when you retire, possibly new ones.

VIEWER

You say you would like to retire to North Wales, I mean at the moment you live locally don't you, here in Milton Keynes?

~~K~~

ur

Oh I live in a village about ten miles out, we thought we had done our duties by new cities in Canberra and so we thought we would evade the bulldozers and the mud and the dust and so on, so we are in a village the other side of Woburn Park. Yes we certainly if the arsonists spare our cottage, we certainly hope to be in North Wales in about a year's time obviously doing things to the house and the garden and so on are bound to be important for quite a long time. Whether they are new exactly I don't know. Learning Welsh I suppose could be a new dramatic experience. um.. I don't know if we will.... we tend to do things together, my wife and I very much, and whether we'll do anything very new or not I'm not sure, um.. no I think probably the music and painting so that one develops more on the arty side than one has had for a long time.

VIEWER

Yes did you develop your musical abilities at school, I mean you learned to play the violin didn't you?

ir

Yes I... Yes I played the violin as a child for most of the school years um.. and um... we did have our school orchestra and so on, but we never won anything at the festivals and so on but we always took part with vigour, there was a very posh rival establishment which always won all the prizes, they had much better violins and they were coached within an inch of its life and so on but we certainly, we weren't inactive or lacking in participation at all. When I consider how long ago it is I think it says something for the system. You know I left school in 1933 so one is talking about the late 20's and early 30's - not bad I think.

3 TO SOMEONE

NG MARRIED

VIEWER

Right passing on to something a little different. Have you got any advice that you would give to somebody getting married? Don't or something like this.

ir

(laughing) well that's what Mr Punch said isn't it, um.. well three of our children are married, I don't know that we've ever ventured to offer them any advice.

VIEWER

How many children have you?

ir

We've got four there's one left, a girl aged fifteen about, um.. I think it would depend partly on whether the advice was asked. I mean if there was a particular problem like for instance um.. one or another partner having a history of mental breakdowns or something, then there might be an occasion for you know at least a discussion if not advice. um.. but it's certainly a thing I would not rush at. um..

VIEWER

No, therefore you are... are you implying that one should have a fairly lengthy courtship?

ir

Oh that must lay immensely with individuals, but then you know I think the whole thing is that if people are getting married, if they've thought about the thing and made up their own mind, and nowadays getting married is really much more um.. agreeing that they want to stand up and be counted among the people that have conformed with society's sort of categorisation, most marriages probably come after a period of living together nowadays, in which case offering advice would usually be um.. very much and usually unwanted and so on. So I think there could be occasions when if it were asked for, some ideas might flow, but on the whole it's not a thing that I would go for.

VIEWER

No, I mean you would still advocate people getting married as opposed to living together?

ir

Oh I think so, um.. I think I'm in favour of it as an institution and it has.. it's got ups and downs obviously, but um.. yes I think I'm in favour of it and um.. you know I think um it's really not the answer to your question, but I think on the whole the um.. frequency of broken marriages is

I think a pity. I think I'm ready to admit that many second marriages appear to do rather well, but all the same, depending on if there are children, I think that the price at which that relative success is attained is put very high. And so far I think probably I could mention all the family with the married parents is probably as good an environment for children as one has evolved and certainly what one has seen now tends to find other solutions not being impressive. I think the short answer to this question is that on the whole I wouldn't offer advice, might give it if asked, depending on the circumstances and so on.

MY JOB INVOLVES

VIEWER Right then Arthur can you outline what you think your job involves here at the Open University?

r (laughter) No...

VIEWER More than one person has laughed at that question

r Well my views are biased of course by the fact that I was a conventional professor in a conventional department,

VIEWER In Australia?

r Yes a more than conventional department because you know in Australia good professors at that time certainly were still good professors, there may have been some erosion of the positions since then. um.. so I find the job extremely peculiar, I think that the um.. the O.U's decision to have professors and to keep on getting them is not really thought through very fully and so I find the job quite peculiar. In a sense it's a position of responsibility without power in that we are supposed to be providing leadership, without the power that appears somehow to promote attention to what a senior person says. I don't think that my department in Canberra was exactly brow beaten, I did try to be prima senta not to be any kind of dictator.

VIEWER

To be what sorry?

Prima senta paris first among equals, but I think that because there was more power and more ultimate um.. power to direct people to duties and so on, therefore, I think that experience and criticism offered and so on was payed more attention. You know my norm here would be, or certainly used to be, that I would offer a suggestion about the way to tackle a teaching problem and I used to allow about a two year lag before people thought that they had thought of it themselves.

VIEWER

Oh I see yes, this is taking other people's ideas on board and then putting them forward as your own?

Yes um.. it's probably that if one is offering advice, suggestion or whatever, as an experienced university teacher, the experience of a lot of students is what gives it merit if it has any, um.. so by the time people think that they have thought of it themselves, perhaps they have because they have had more experience. Um.. so I have found the job quite peculiar, you know one is some kind of assumed leader in my case in geography, but on the whole um.. you know one hasn't a department and people shoot off to inter-disciplinary courses leaving the core defenceless and so on. It is incredibly a free for all place in what people choose to do or not to do, whether to come in or not to come in and so on. You know it's divided into the monks and the wise virgins and the wise virgins on the whole are the ones that don't come in. Monks are the ones that do come in, um.. so my job consists of being a spectator of this curious academic chaos and occasionally of course, of carrying out some duty of committee or being a dean for a period or something like that. um.. and of course, being the best course teacher that one can, or the best team member, you know being as loyal as possible to the chairman whoever that might be, perhaps a comparatively junior person um.. so it's a very different job, I think just being an O.U. academic is an interesting job, but being professor of geography

I think is slightly a non-job, but the course team thing, I think on the whole I've come to be, if not hostile to the course team idea, at least very very cautious about the circumstances in which I'm sure it's a good thing. Particularly if large, I'm very very dubious indeed about it. I may have said some of this before, I don't like the fact that one has only one or two of maybe three or so units in a course, I don't like having such a small proportion of a course in which one is actually contributing substantially um.. I don't know what else there is about the O.U. research has been a bit of a joke um...

VIEWER

For you personally or your department?

r

I was thinking of me personally um.. I think for everybody initially, for the non-department we have now a small research group, not in my field and I have tried to back it and to take part in a useful way, the initiative in that really belongs to Philip Sarn um.. and I think that that group is now doing quite well on a funding project in and I think there's a group of three or four projects some of them going across discipline bounds which um.. are worthwhile. um.. I certainly haven't been the sort of literary in that activity in the way that I might have expected if there had been a similar group in Canberra, Um.. As I said I've tried to back it and to be a loyal member of the group, not all the geographers are in this group, John Blundell for instance is active but is active....

VIEWER

John Blunden?

r

Yes he's the leader, he is active outside that group um.. I suppose my own work is faintly active has remained active throughout the eleven years or twelve years whatever it is but outside any sort of O.U. group, that probably is not peculiar, you know I think sometimes individual academics do

just have individual interests and there is nothing peculiar or different about that. um... so....

VIEWER

Were you professor of geography in Canberra?

ur

Yes.

VIEWER

Yes but how does your job here as professor of geography differ from that in Canberra?

r

Well for one thing I was a professor of whole geographer,

VIEWER

Which?

r

Whole, whereas here it's human geography in a faculty of social sciences, there's an earth sciences group in the faculty of science which isn't a sciences group it covers geology, geo-physics and geo-chemistry and there's some oceanography but it's geological oceanography and there are quite a few oceanography in that. There isn't any climatology there's no bio-geography although of course some of the ecologists are interested in somewhat similar problems, so I was a professor of whole geography, I knew of course, that it would be a change in that respect, but I didn't expect the earth sciences to be quite such a nuisance in the way of burying the progress of these other things, and therefore, I thought the earth sciences would be the earth sciences and therefore, a meeting place would be much easier than it has proved to be.

VIEWER

That's not the case?

—

That's right.

IEWER

Is this because of the way the earth science group is run?

Oh I think so yes, you know I think um.. Professor Gaskeigne you know obviously with a higher reputation as a geologist,

and it's grown in stature since he's been here and his drive was towards to geology and closely related fields, both very active in recent years, crucially active in interaction with geology as such. So it is understandable that's what earth sciences is here, but um.. I think there ought to be a better word, it ought to be geological sciences plural and not earth sciences which certainly ought to include at least climatology um.. it's an important thing in a university that's going to get into earth sciences certainly ought to have work in that field and it does, of course it does mesh you see, I mean it meshes with um.. agricultural geography and even with urban studies because cities have climates too that's one change. I knew it would be somewhat like that so I came to that with my eyes open. I didn't I think foresee that one would get so much into social urban problems as a main field. The nearest to an agricultural geography for instance in this university is perhaps a food productions systems course, um.. the places where geography ought to be contributing apt. to be a blank or even, even horrendous. So I hadn't expected that and John Blunden had worked on agricultural problems so I quite thought that he would develop that. um.. and I hadn't expected a lack of climatologists for him to mesh with, in fact his interests didn't stay there, they moved into mineral resources so as I say food production systems is the only part of what um.. certainly in my own department in Canberra was an important part of what we did. um.. it's partly I suppose a.. the fact that um.. since the Open University has been in existence that Britain has become very introspective and we are very urban I suppose that focus on this sort of urban.. often political scene is fair enough. You see even if you take the teaching, there used to be a course called urban development, which incidentally included technologists, the new one the technologists said they would like to contribute but couldn't because they were too busy selling social scientists only, it's title changed to Urban change and conflict,

VIEWER

Yes I don't know that one at all.

r

It's going out to just coming up to going out to for the first time.

VIEWER

Yes what number is that

r

Two zero two it's plain D you see the other one was D T but 201 I think it was, but the new one is plain D 202 it's very much western cities, some may go as far as Poland but no third world cities, it's very political, it's not very spacial, it's not very much about physical city, but after all there are physical things about cities they should do.

VIEWER

Yes that's true.

r

So yes, in that respect I think the development has been something that I didn't expect.

S IN THE NEWS

VIEWER

Going back to the topics in the news now, how interested would you say you are in topics in the news and current affairs? Are you sort of moderately interested, you're not that interested are you?

r

I would find that very hard to answer um.. I'm an ardent reader and have been ever since I moved to England, I read the Guardian, you know the top people take the Times, intelligent people read the Guardian.

VIEWER

(laughing) yes.

ur

I find it increasingly difficult because the news is so repulsive, so depressing that I find it quite difficult to keep up um.. really steady and deep reading of the Guardian. But you know I suppose I ^owould be above average in some sort of interest in current affairs.

VIEWER

Would you consider yourself well informed?

ur

Not very, I think by the standards of social scientists I wouldn't think I was very well informed, I think there's one reason for that, I don't think I'm a fast enough reader. To inform myself an thing like thoroughly about a topic takes a lot of time.

VIEWER

Yes it does.

ur

And I'm quite a slow reader, you know one can skip of course, but to... if I'm really seriously involved I'm quite a slow reader, so I wouldn't claim to be very well informed, I think my answer to your question is: perhaps that I try to be aware of what are the current problems are and sufficiently in touch to know where to go to find out more if I want to, to get more involved in this or that problem. I think that's fair.

VIEWER

O.K. thanks very much then Arthur, that's super.

Interview with BenPOLANDINTERVIEWER

O.K. then Ben how do you see the present situation in Poland?

Ben

I think you have to be more specific in your question before I can start to give you an answer.

INTERVIEWER

Um . . with respect to the action by the unions

Ben

Yes but which action, when?

INTERVIEWER

Well any particular action you would like to pick on.

Ben

Well to tell you the truth, if you don't specify the particular action um . . I would be more or less unable to dredge up any particular action myself, because I've not been following it in that kind of detail and I suppose I can give a general view of what . . . I mean it seems to me that when you say the unions you must be talking about Solidarity

INTERVIEWER

Yes that's right

Ben

Which I percieve now as kind of one thing and um . . the driving spirit behind that I percieve is Walesa and it seems to me that he is in a position of having to walk a real tightrope because he has got to, he's got to find a way to create some room to move without frightening Russia, and if he frightens them they'll clobber him and um . . they are unfortunately it seems to me in a situation - they've put themselves there the Russians have where they are easy to frighten. I mean what I really . . . I tend to see it in more general terms um . . anybody who steps out on the path that says the only way to be secure is to put other people down is going to be extremely frightened when they start rising up, or they are going to percieve any action by the people they are putting as a rising up, and they will then become very frightened and tend to put it down harder, and thereby create more and more resistance to what it is that they are doing, it's a losing proposition in the end and I don't

really . . . I mean what I would like to be able to see. and don't, are the various ways in which a situation like that can evolve, I mean sure anybody can say "well there are certain concrete options, concrete futures that can transpire" so that you can say that the Russians will move in with an iron fist, or the Polish economy will wreck itself and then somebody, maybe the Russians will move in with some iron aid, or, you know you can go on like this, but what I would like to be able to see if I felt I understood the situation, then I would see it in terms of an unfolding process, almost like a plant growing and I'd be able to look ahead and say "well, it's likely to take this kind of shape and these kinds of leaves are . . ." you know, but I can't do that and because I can't do that, I don't reckon I understand the situation and that's why it takes me a long time to get started and say anything about 'how do you view the situation in Poland'. So the fact is, I don't feel that I understand it. I mean in very general terms for me it's just um . . . it's, I think Walesa is doing the best that can be done, I mean he's labouring under . . . he feels opposed by people, the way I see it, he feels opposed by people who regard power as power to dominate or destroy as the be all and end all, and invariably people in that position are easy to frighten and would go to great lengths to hide the fact and you know he's just got to sort of manoeuvre this way and manoeuvre that way, do his very best to make them feel understood, or also staking out staking a claim to have his own views for Solidarity, for Solidarity to have its own views um . . . and to, I mean just looking at it in terms of conversational process, that's all he can do, he's got to make them feel understood, and he's got to somehow make them feel like they are exercising power by listening to him, while listening to Solidarity while they express their own views, he's somehow got to make them feel comfortable with the idea that there might be disagreement but that certainly isn't the same as misunderstanding, and if they understand each other very well then they can work towards agreement, they mustn't confuse the two, understanding - misunderstanding and disagreement. That's in the end, that's all I see, I guess I see it in terms of that's what he has to do and in the end, the situation only

becomes simple for me to understand, if I go into one person and say "O.K. what's he got to do - that's what he's got to do"

INTERVIEWER

What action has he got to take?

Ben

No that's what he has to achieve, how he can achieve that I don't know, only he can decide that in his situation, but that's what he's got to achieve.

VIOLENCE ON T.V.

INTERVIEWER

Right Ben to change the subject, have you any views on violence in television programmes?

Ben

Tell you what Jenny, would it save you tape, if you turn the thing off while I think before I say anything?

INTERVIEWER

It doesn't particularly matter

Ben

Or do you want to know how long I thought?

INTERVIEWER

Well the hesitations are fairly important

Ben

O.K. well there will be long ones sometimes

INTERVIEWER

And long pauses, I mean in actual fact the length of the pauses are sometimes noted by the typist, but if it is a long hesitation, we are putting that in as part of our analysis, I have got enough tapes actually.

Ben

Violence on television. . . . Well there's what I think, and there's what I think other people think . . . what I think other people think seems to be divided between two camps, those who think it provides a release and those who think it provides provocation. . . . I think the best point of reference I can take is what happens when I see my three year old daughter watching it because we don't necessarily go up and switch it off to protect her from it or anything like that.

INTERVIEWER

You just have this one television do you?

Ben

No there's another one upstairs but she's only three so she tends to be where we are. The other night just before or just after supper, I can't remember which, just as we were waiting for Panorama to come on and Blake's Seven was on,

INTERVIEWER

Between about seven and eight something like this?

Ben

That's right, Blake's Seven is one of the most violent television programmes that I've ever encountered, it really is horrid

INTERVIEWER

But the Professionals comes quite close to that possibly.

Ben

Yes: but it's a very different kind, in the Professionals the violence encountered is always of a known kind, in Blake's Seven it is very often of an unknown kind, you know people don't know what they are facing, so it's more scary and the attitude that I adopt is um . . I mean in the end the question that you are asking me would be something like 'do you switch off or not, on your own behalf or on somebody else's behalf', which raises censorship issues and all the rest, I mean who switches off and where in the transmission chain, you know the whole thing's all an accident and I don't think it is necessary to get into at all, I'm more inclined to say that provided I don't begrudge the B.B.C. spending my licence money on things like Blake's Seven and so on, or the Professionals, then I would rather that it was there and I had the option of switching it off myself. Given that then there is no problem for me and I'll switch off or not, and at times I enjoy watching something like the Professionals, you know it's just the thing to watch, somehow just the thing I need, two in a row is just you know

INTERVIEWER

Too much

Ben

That's right, that's it, but now and again it's just the thing, now and again Blake's Seven is just the thing, though in my opinion, it has no side, it's no match for Star Trek, (laughing) but anyway, the censorship issue comes for me when, you're

asking the question of who needs to be protected, and are they capable of protecting themselves or not and as far as the treatment of my daughter is concerned, if something like that comes on I watch it and I watch her at the same time, and I listen to her and the only thing that I take care to be sure she understands is that she can walk up and switch it off, anytime,

INTERVIEWER

Yes, is she two,

Ben

She's three and in the case of Blake's Seven she said "I don't like that" and I said "I don't like it much either, let's switch it off" she said "O.K." I switched it off, turned it on to something else, that was in fact nearly as nauseating, so, you know, we switched to something, we didn't actually feel like switching the set off entirely. So, in that sense, since Helen felt free to tell me that she didn't like it, which is a condition that I take care to maintain to the best of my ability, that she feels free to say exactly what she is feeling, you know, and then after that we can decide exactly what we are going to do about it. um . . . it's of no consequence, the only fear that I would have, would be that some particular image that rose on the set before she said "I don't like it" might in some sense contaminate her, frighten her, or leave a deep lasting something or other. But what I would . . . (that's unavoidable) what I would rather do would be to just make it clear to her that it is in her power to switch that stuff off, most of it is just fantasy, make believe, on the other hand, I don't want to protect her from it, what I want to do is vaccinate her against it and this is the only way I can see to do it, it's there, it's in real life as well and very many times, not always, but very many times if you can just go calm in a violent situation then you yourself might help to cool it, and so I don't think that I'm doing an unfortunate thing by teaching her that she can switch it off, because in the end, I reckon that if you're in a violent situation yourself the only way that you can get out of it, if you are not possessed of massive physical strength is if you actually somehow change your perceptions of the situation so that you can give a response that you wouldn't have given otherwise and that might influence it, it's dicey and it's dodgy and it

might not work, but I see no other way and I don't think that teaching her to switch off the set actually is in opposition to that, I think it's in some harmony and in parallel with it. So in that respect it's no problem, I don't treat it as a subject in itself, all I do is try to be absolutely certain that the channels of communication between me and her watching the set are fully open so that she and I together, or eventually she by herself, can respond to the situation as her feelings indicate are healthy. So it is not a problem if one can respond, so

INTERVIEWER

Would you see sports like boxing and karate maybe fencing as fringe violence? television does give these particular sports some coverage.

Ben

I've never seen karate on television, I've seen chinese boxing on television or a very violent variant of it, um . . . you know a potentially lethal variant, you know where people are not wearing protection and they are using hands and feet both and then they kick their wonders to behold. All these things to me represent an attempt to synthesise two very disparent things, they basically amount to making an art form out of something that is fundamentally destructive and it's a synthesis that I don't really think works, I sometimes like to enjoy watching boxing, that is I sometimes enjoy watching boxing but I'm not sure why except in so far as (coughing - one day I'll get rid of this frog in my throat - it's still there) except um that I can appreciate it as an art form, I can appreciate fencing as an art form and I can appreciate karate as an art form, and if the two guys who are out there and both doing it in a sense deliberately, I can appreciate that as well; nevertheless there's another sense in which I feel that both those guys whoever they are, are being exploited. They are not really there by fully free choice, I mean there are economic forces that dictated that they go in that direction as a career say, and I would be very surprised if any of them you know enjoy it without mixed feelings. I mean they take physical battering, they take physical injury and sometimes permanent,

um . . I . . you know they don't have to worry about giving it, because they know the other guy is giving it too, and they know that it is both fully understood between them and the rules of the game that you don't show pain and you know, if you, . . . I've read some really brilliant stuff you know Norman Mailer's stuff about Mohamed Ali boxing in Africa, I mean Mailer sees with a very acute eye and what he wrote about that, was to me extremely believable, and seemed to me to get right into where it was really all at, and it isn't about pain and it isn't about aggression, it's a form of communication and ultimately communion between those two boxers, or those two fighters, whatever the form is that they're using, and they certainly find out about, a lot about each other, and you know, the phenomenon of boxers coming out of the ring and hugging each other you know, because they have been com. . . they have been having a conversation at a very very intimate level, there's no doubt about it. But that is something that never gets on to the telly, the people on the telly don't see it in that depth, so in the end I suppose, you know it just comes down to the question of: well do I want to watch it and what do I think about it if I do? sometimes I enjoy watching it and sometimes I don't and when I enjoy it I look at it, and when I don't enjoy it I switch off and I don't actually begrudge that portion of my licence fee that's going for it, because it doesn't seem to me to be an enormous amount. I sure as hell begrudge the Match of the Day and the football, but the boxing, no I don't think that there's that much of it and I don't begrudge it. As regards something like allowing a child to watch, it's exactly the same philosophy as before, if she finds it noxious she feels free to say so, and she feels free to turn about and turn it off, or to walk out um . . and the only danger that I still see in there is the possibility that she will see something which inherently goes straight into her past all her defences and screws her up, but I just don't . . it's a risk but I'd rather that she felt able to look at anything on the box and to see it as something - on

the box, as something switchable off, you know. I think this philosophy breaks down if she's watching you know, a newsreel on the results of the Pol Pot regime in Cambodia you know, I mean that's pretty tough stuff, and you can't just say it's on the box switch it off because that is presumably real you know, and I . . . you know that sort of thing I would tend to manoeuvre so that she wouldn't see it, um . . . I mean that's the same sort of thing as flying in airplanes, we don't tell her that the things sometimes crash in flames and chop everybody to bits you know,

INTERVIEWER

Would you see violence in television programmes, and violent sports, for example like boxing , um. . particularly harmful in a family situation in so far as they might aid violence in families?

Ben

No actually. The context in which that kind of violence is viewed, violence, unless I've misunderstood you, you were talking about boxing and karate and sport and so on, no that's just um .gladiatorial violence, it's arranged within very explicit boundaries and in that sense it is inherently switchable off all along the line, one way or another. The kind that I would worry about is the kind that shows people in apparently ordinary situations totally mis-managing their communications and you know winding up beating each other psychologically and physically - that's the kind that I worry about, the kind where it's not easy to put a box around it, or the kind that can be taken as a model for this is the way that things are done, this is how to do things, that's the kind I worry about, that's the kind where you know, if I were watching that with Helen, I'd be commenting on how they were blowing it, that's what I'd be doing and I might be disinclined to let her watch it myself until I was pretty sure she understood what she might do differently in the situation.

BALLOONING/
SOLAR ENERGY

INTERVIEWER

Right, the other weekend a fellow crossed the channel using a balloon and solar energy, do you see ballooning as a form

of travel in the future?

Ben

I'm sorry I know of a chap who crossed the channel with a solar powered aircraft, I don't know anything about a solar powered balloon.

INTERVIEWER

About the weekend of August 23rd something like that

Ben

Ah, yes now I remember it was a sun powered balloon, it was hot air balloon that was using the sun to heat the air wasn't it?

INTERVIEWER

Yes that's right it was about two hours plus, that he did it in, um . . I think it had got a double skin.

Ben

Well what do you mean by balloons, there's a . . the guys who invented that kind of airship and then couldn't get it off the ground in England, it got wrecked in a wind storm, they went to Canada to work and now they're back, Monk & Company, I mean there's an unrigid payload carrying airship, which carries a couple of tons um . . do you want to include that in your transcript?

INTERVIEWER

Yes, yes.

Ben

Well the um . . . you want to know how I see it? Just what I think in general about it?

INTERVIEWER

Well do you think that ballooning is just a nice hobby or a pastime? or do you see that it can be enlarged and it can be a form of transport, perhaps like a zeppelin

Ben

Oh I see, yes. . . . well I don't see any reason why they can't be used as a form of transport, um . . routinely especially for freight. What does bother me a little bit though, is that here's a fairly largish airship, the um . . th one that just got off the ground recently, the new one, it only carries a couple of tons and um . . to carry the kind of

payload that an ordinary 747 can carry would I think require something that's really amazing in size and float it on the air, you have to displace one hell of a lot of air to get a payload of twenty tons or more, um . . . I don't know, supposing I look at it from an aesthetic angle; I find airplanes as a general rule, beautiful. I mean I sometimes look up at them and I say "that's beautiful" it's also impossible, you know I mean the worlds been around for millions of years and humans have been around for hundreds of thousands, and airplanes have been around for fifty, unless there was a period in history that we don't know about and it really is quite amazing, um . . . I mean the only thing that I don't like about airplanes is the fact that they are inherently unstable, I mean they have got very tight contruction and operating procedures which make it pretty unlikely that anything will go wrong. If anything does go wrong it's usually a catastrophe, um . . . and um from that point of view I mistrust them, I would mistrust them less if I were the pilot, I'm one of the world's worst car passengers, and one of the world's most frightening drivers I'm told, You know, so what do you do, it's a sense of whether you are running the show or not and so on, you know and there is also the problem of mechanical failure in airplanes, they've got. . . they've come a fair distance in making fail-safe designs and even those sometimes don't work, like that Boeing that was designed with a supposedly fail-safe hinge design on the elevators and they all broke at once and that was that. um . . . I don't know, I suppose, I mean I'M rambling around on this subject (coughing - and I'm going to trade in my throat for another one) because I've had a cold.

INTERVIEWER

Have you?

Ben

Yes it's probably doing it. Anyway, the . . . the thing I like about airplanes is their beauty, and their speed, and I wouldn't mind flying one myself, if they weren't so bloody noisy, and if flying one were a free operation, which it isn't, it's a matter of an enormously complex administration, that's an office up there in the front of the plane, that's what it

really is. Now and again the pilot gets to exercise his piloting skill, but most of the time it's an office, and a pretty hard working one I think. So that's as much as I can say for and against them, they're inherently unstable, the statistics say that they are safer than cars per passenger mile, but if you look at the statistics the other way; you travel distances in an airplane that you wouldn't contemplate travelling in a car. What matters to me are . . . is the fatality rate for passenger minute per unit time and according to that per minute it's three times unsafe to use an airplane as in a car so there is the safety aspect that puts me off, and they use an enormous amount of fuel, the fuel they use is unbelievable, it's just practically imponderable from say, an average motorist's point of view. I mean not all of them, the little ones carrying six passengers and doing two or three hundred miles per hour can get mileage per gallon roughly the same as a car, which is actually quite amazing when you come down to it um . . . I suppose if I was being sensible and look at the amount of fuel used for each passenger per mile, it would actually come out pretty good and I should stop complaining. Actually now that I've thought about that I will, so my only negative on that is the safety aspect. Balloons - to whom I'm opposing all this, the thing I like about balloons is that they are absolutely quiet, air ships won't be absolutely quiet, but can be made barely and the nice thing about them is that if something goes wrong as a general rule, you've got all the time in the world to think about what to do to fix it, which means that your thinking is likely to be a fair bit more rapid and effective and you'll get it fixed sooner than if you're under pressure. Aesthetically I like them, they're very pretty, both kinds, the hot air balloons and the airships, if we just take the airships, I think they're very nice and in principle much safer, they're very very slow, which means that taking a balloon trip is a cruise or something suitable mainly for freight and I don't see their carrying capacity as being suitable for freight. So it seems to me that their most likely uses, the most useful use is to carry people distances comparable to those that trains

would carry them and in that sense I don't think that they could compete with trains.

INTERVIEWER

What about barges on canals?

Ben

Ah well that to me is really um . . a really good way of carrying freight and a really good way of spending time getting from one place to another very slowly. I think it's a much more viable way of carrying freight than balloons and I think it's even a more viable way of carrying freight than trains ultimately. I don't think I ever did know the economic reasons why trains took over from canals um . . I know that some people today still build close to a canal and use it for part of their freight carrying route.

INTERVIEWER

So you obviously see ballooning as a form of transport as fairly important.

Ben

No I didn't say that. Um . . If I weigh it up against planes, balloons lack speed and carrying capacity; if I weight them up against trains, for carrying capacity and for speed, they might be comparable, but certainly not for carrying capacity um . . if I weighed them up against barges on canals, they again lose out on carrying capacity, not on speed but on carrying capacity. I think it's just possible that canal barges might become important again, but at the moment I have to admit that I see the canals mainly as a pleasure thing, and that I see balloons mainly as people carriers and certainly as not very efficient people carriers, better for pleasure. I mean a train can go in all weather and will have roughly the same speed.

INTERVIEWER

But it is obviously quite an achievement using solar energy, I mean solar energy seems to be coming much more into its own in the forms of solar heating, various projects that are going on in Milton Keynes, would you see um

Ben

So you say.

INTERVIEWER

Would you say that solar energy could be used more?

Ben

Oh well sure

INTERVIEWER

O.K. I'm just going to check the tape Bob.

Right yes, how do you see the development of the third world politically and economically?

THIRD WORLD

Ben

This form of questioning is inherently difficult for me to respond to, I find the questions very very general um . .

Um . .

INTERVIEWER

They've had to be kept general because in the early interviews I wasn't necessarily interviewing academics, and by that I mean people who might be well read about a number of topics, I was interviewing um if I may say so, fairly ordinary people, and therefore I'd left the question fairly wide on the advice of supervisors in order to get some sort of response, the question is left wide in order for you to either want to expand it if you like or detract it and talk about a little piece.

Ben

Well - how do I see the development of the third world, politically and economically is that what you said?

INTERVIEWER

Yes..

Ben

(long pause) . . . well, whenever somebody mentions that subject to me, what I tend to think of is the interactive process between the north and the south. What has to happen in order for that process to be constructive, um . . . I think of the debate about the boundary point and um . . the apparent contradiction between the need for people to feel independent and the need for people to be helped. needs as perceived by the people themselves and that apparent contradiction for me comes from the (what to me is the stupidity) perceiving in terms of power, politics ultimately is about

compelling . . . and economics in fact absolutely free ultimately as a giving people. Little choice in my view, um . . . so I would have to repose your question, I wouldn't want to talk about the political and economic situations, I would talk about . . . the . . . quality of the communication that's going on between people that are . . . the people in themselves and I would talk about specific ways in which that communication process was being impaired or totally perverted by traditional political and economic practices, that's what I could do. though the most important thing is that the people in the third world can see no way to ask the people in the developed world for help in a way which makes the people in the developed world think that they are going to be appreciated, I'm not sure I can see any such way in the either. . . . much less can the people in the third world see any way in which they can make people in the north feel understood cared about, because even if they are seen as caring they can't be seen as powerful and power in that sense means, you know not political power to repress but capability, so the only option is to be the receivers fundamentally and they don't know how to initiate that, and the people in the north are almost certainly going to initiate it in a way that will screw it straight away, if they simply transfer resources, they will be seen either as belittling or as exploitable people in the north, and if they do it by a bargaining process. . . you must have heard similar things from Mark. .

INTERVIEWER

Yes I thought about these processes and bargaining processes and I thought 'I've heard this somewhere before'. (laughing)

BEN

If they do it by bargaining processes the people in the north will inevitably and invariably will use their power to set up situations and the people of the south will have been exploited one way or another you can guarantee it. So if they give they will be seen as belittling or exploitable, if they do deals they will be seen as exploiting . . . in fact, the more I think about the more I think the people in the north

are hamstrung. There's hardly anything that they can do because of their power that won't be mistrusted, so the initiative has to come from the people in the south and the only initiative that will do them any good is if they figure out how to make a request that is not for themselves which is neither begging or bullying, how to make a request that, I mean this stuff you won't have heard from Mike, this is a different tactic, um . . . how to take an initiative and make a request in a way which makes the people in the north feel that their capabilities have been recognised and that they are being appreciated, and if they do that then the people in the south could take that kind of initiative then they could pull it off. I don't at present see how the people in the north can take an initiative that won't be mistrusted, the only initiative they could take is one which sets out the situation which enables the people in the south to take the initiative that they have to take, that's the only one and that would be a rare exercise in humanistic diplomacy, that to me is the nub of the whole thing between north and south and if there is anything you ever discover about me from this talk it is that I'll go for the nub (laughter) that's what I think about it you know it poses a problem, what initiative can the people in the north take, because that's where we are, that will enable the people in the south to take the initiative that they have to take, before the conversation can go on mutually constructive terms - that's it.

HUNGER STRIKERS

INTERVIEWER

Right I expect you've read about the situation in Northern Ireland and the prisoners on hunger strike in the Maze prison in Belfast, um . . . do you think these prisoners should be given political status?

BEN

I don't know - um. . . my perception is that the prisoners and the British government are locked in a power struggle and

that they are therefore, apparently wasting their time. My impression is well, is it the, only people who are in that power struggle who are simultaneously trying to exercise anything caring, are the British, but that they are so . . . they look too big to the Republicans that the Republicans feel that they are fair game for anything, you know, mistrust them entirely and you know, it sounds the same as the north and south thing. I find the use of violence by the Republicans as absolutely abhorrent, at the same time, I cannot label them as evil beings. Members of my own family haven't been bombed you know, so it is perfectly possible that if I were hurt that badly, I would lose my perspective and wish to destroy them . . . it seems to me that the British are saying "rules are rules - you want to kill yourselves you go ahead that's up to you" it seems to me that the Republicans do themselves a disservice by trying to make it look that they have no choice but to kill themselves because manifestly they have a choice and, manifestly, they are not giving other people the choice as to whether they die or you know, that's standard argument that goes through the media every other week, they are doing themselves a disservice by arguing on such apparently stupid grounds, as far as I can see. I don't know what is foing on behind the scenes, but as far as I can tell from what I pick up in the media, there will be n o constructive solution, which is to say, both sides win, instead of one side having to lose, until both sides are very certain that the other side understands how they really feel and why, and they can then begin talking about what the hell they can do and in that circumstance I think that the Republicans are the ones now . . . I didn't mean to say it that way - the Republicans, very much more than the British are doing things which guarantee that the communication cannot occur that would lead to their feeling understood, I really mean that they are runnning around shooting and bombing people, they are self-alienating and self-isolating, and I don't perceive the British as doing the same. The same job of chopping up the very communication channel on which all depends, that's useless, the Republicans seem to think that the only

way that they are going to get listened to, is if they have the power to make people listen, I mean people can't be coerced into listening, people can't listen who are under coercion, they just can't, you certainly can't feel accepted and understood and cared for by somebody that you've coerced, that's understood. So that's what I think about that situation I you know. . the . . again it's a situation, the British have more power and somehow if they had the wit and knew how to take an initiative that enabled the Republicans to take as initiative toward the British which enabled the British to do something in the field and be appreciated for it, to do something of their own construction and offer it and feel appreciated for it then it would work. What initiative that would be - I don't know, you know it's got to be an initiative that sort of sets up the situation whereby the Republicans can initiate this constructive conversation, that's what it has to be. It's the same as the north and south, so you know that's . . that again is my nub of it. At the moment the Republicans are just cutting their own throats and everybody else's in the process as far as I can see. But um . . to me it really is a matter of understanding one's own communication and the needs of one's environment and um . . how the processes go really when they are going, and also one understands that sort of thing, one feels absolutely trapped and so the Republicans don't feel they have any choice. To the rest of the world they look stupid (not all the rest of the world) there are others as well, no not stupid I'm sorry - I was . . I'm rejecting that, I think that to a lot of the rest of the world they look stupid because they put forward these arguments that seem so inherently destroyable, to me they look ignorant, but that's a pejorative term, to me they are in a situation where if they . . . Well I kind of perceive really and I think that if people can see something more constructive to do they will do it, they simply can't see it, but unfortunately once an organisation like the I.R.A. develops the people in it have a vested interest in getting other people to act the same way. Otherwise people in it are

extremely exposed and threatenable, so um . . . it becomes a cancer and you know, what do you do with cancers anywhere, there are different things that you can do, but there is a school that advocates cutting them out, there's a school that advocates pumping them full of radiation, um . . . there is another school which advocates loving them back into health, that's the one I like.

INTERVIEWER

You mean a healing school?

BEN

Yes. those people aren't evil they're sick, and if we're strong enough we can help them to heal themselves without getting too sick ourselves, that's what it's all about for me, (long pause) these are quiet moments - but the members of my family haven't been bombed or killed yet. I don't know if I'd be able to hold on to that perspective.

INTERVIEWER

It would depend how much you could love the other side?

BEN

No it would depend on how much I could see them as persons rather than things. I mean somebody who bombs you is treating you as a thing and it's extremely difficult not to do it back. If they manage to hurt you, it's very difficult not to do it back.

HOBBIES

INTERVIEWER

Do you have any hobbies or pastimes which you indulge in outside of the Open University?

BEN

In a way yes, you know you can give all these pat answers, I do this or, I do that, you know (long pause) What would you say the difference between a hobby and a pastime is?

INTERVIEWER

I would have thought a hobby was much more intense and possibly something which has gone on for a period of time, some years in fact, whereas the pastime might be something which you enjoyed doing in this particular moment in time as a diversion from your work, but it is not so intense.

INTERVIEWER

For example in my case, I collected stamps ever since I was about six, I think it was about when I was twenty, I had to decide that I couldn't collect stamps from every country, because I was stock piling stamps and not realising or appreciating what countries I was collecting. So I then specialised in just collecting first day cover issues for the British isles or Jersey etc., that I would call my hobby, not exactly a lifetime because I started when I was six, but quite um . . it occupied most of my life when I had some time free I've devoted time to that. Whereas perhaps a pastime in my case, or a diversion is singing in a group on Sundays.

BEN

Well I only have pastimes when I'm tired and strictly speaking I ought to be asleep, but don't want to be asleep because there are things I want to do, in which case I'm neither asleep nor do what I want to do, but I'll lapse into a pastime, which I regard really as quite stupid. A typical pastime in that context is watching the box. Hobbies - well, I like sailing, and I like cycling I like those things that kind of involve um . . moving in harmony with something, as a rule I dislike competitive sports, I don't find them at all relaxing even in spite of the exercise I come out more stressed up than when I went in and I don't need that. But the main thing that I spend most of my time on to the exclusion of anything that I would call hobbies or pastimes is learning to communicate; I guess there isn't anything at the moment that gives me more lift than understanding a little bit more about something about how to do it better,

INTERVIEWER

Are you talking about verbal communication or . .

BEN

All kinds. I mean how to do it better, is not the right phrasing, it's more how to get more out of it's way to let it happen more easily, that's about as much as I can say.

INTERVIEWER

That's fine.

INTERVIEWER

Right have you got any advice for someone getting married?
Or perhaps I could say, would you give any advice?

BEN

No I wouldn't give advice without offering it first, um . . .
and I wouldn't offer it unless I had some reason to believe
from the person I was talking to that the advice I could offer
might be relevant. I wouldn't be able to do anything more
than say one of the most important things I've learned for
myself, in the absence of an actual person to talk to, and
the most important thing that I've learned for myself is
something that you may have heard from Mike Hussey you know,
in the words: there are no irresolvable discourses.

INTERVIEWER

I can't remember that actually

BEN

Oh I wouldn't be surprised if you found that word for word
in this. That is basically that um conflict is not
disagreement, conflict is mutual interruption - mutual interrup-
tion in the process of communicating . . . if you get the process
right, so that you're not interrupting each other, then there
is no conflict, there's a lot of mutual understanding, there
may still be disagreement, but the disagreements tend to get
ironed out in this circumstance, um . . . there are also certain
phenomenon, which is when certain parts of the process are
completed right one starts looking beautiful to the other
things like that.

INTERVIEWER

You would still advocate people getting married as opposed
to living together and bringing up children within that sort
of framework.

BEN

Well I take your point of the traditional view that if you're
going to bring up kids, you'd better have that commitment
to each other, which is in a sense implausible, (long pause)
there are so many different cults as it were that can arise
within a living together situation - you know what Bach calls
the private freedom cult, you do your thing and I'll do mine,
we are both free beings and if we have a child then fine, and
if we don't well that's the way it is and um . . . Then there is

I just don't think that just living together is a good enough environment in which to bring up kids, but when I say that I'm operating within an assumed context, that might be different from somebody elses. Maybe if I lived in a commune with a whole load of people around and the child regarded the whole thing as its family it wouldn't matter so much, But in this traditional way in which I live the child depends much more on the just two. You know I don't necessarily just advocate the nuclear family structure, but I need it, and given that I need it, I think being married is much more important, certainly for a child, than just living together. There are other aspects though, the um . . I'm not a catholic, in fact I'm hardly anything anymore, because I regard the teachings of most institutionalised religions as positively obstructing accurate communication between people, but um I've been told that the catholic church says "loving and willing to love are the same thing" and it is on that basis that they enforce the idea of marriage as being equivalent to love. um . . I think they've got it both right and wrong they've got it wrong in that you cannot will to love and you cannot command anybody to love, it's a nonsense, it doesn't work that way, but there are things that you can do, and they take skill and care to avoid blocking the growth of love and even sometimes to positively nourish it, you can't will to do it and you can't command it and yet you can do these other things that do take skill and care and therefore, are something learnable and willable and doing those is something that to me is what being married is about. Being married is a promise to do those things, now the trouble is that I sure as hell didn't know what they were when I got married, I don't think most people know what they are. They are things that are caring and freeing, they're perceived that way, but they really take a lot of skill with regard to knowing the processes of communication and doing everything you can to be sure you're not blocking it, letting it happen, that's how I see it, um so that I would be inclined to say that nobody should really be allowed to get married until they know how these processes work and then if they can make a meaningful promise to pursue

them because they're inherently freeing. What it means too is that at the same time that the other person becomes more real to you and you become more at one with that person, at the same time your capacity to relate to other people increases and so it's kind of, you know, that person is essential, but it is in no way an exclusive thing. I think that the culture is really in trouble on this score, I believe in widespread intimacy, and you know by intimacy I mean open direct communication, you know the kind that leads to really genuine mutual understanding and people aren't actually interrupting each other in everything that they're doing, they're actually helping each other and um what I find myself is that marriage is a pretty good place to learn about these things. The one thing that the marriage commitment does, that you can't have in just living together, if that sense of a conflict is not something that you cannot just walk away from, you've got to learn how to communicate to solve it, that's the one thing that it does.

INTERVIEWER

Right Ben, I'll think I'll start another tape.

BEN

Tell you what, is it running now? because I want to say a few more things about that, especially about marriage.

INTERVIEWER

Yes that's fine

BEN

I would make a recommendation to anybody who is thinking about getting married, even to anybody who was wanting to get married with nobody in sight, I would say that there are three books you've got to read

INTERVIEWER

Got to read?

BEN

Yes I'd say it that way in a sense that if you don't read these, you don't know what you're missing, the amount of ignorance and suffering through which you will go, by not knowing what's in these is enormous and I will vouch for that. One is 'I'm becoming a Person' by Carl Rogers, another is 'Parent effectiveness training' by Thomas Gordon combined with 'P.E.T. in Action', the third one is 'Pairing' by Geroge Bach

and Ronald Doich and of these, perhaps the most important is that last one, it's been out for eleven years and um . . . to me it says what's important better than anything else that I've seen, and leaves a lot of things that are still being written, looking a bit benighted, I would go that far. (long pause) I might come back to it later.

'MY JOB'

INTERVIEWER

Right, how do you see your job at the Open University?

BEN

Well that's something that one has to learn how to say in a couple of sentences. So I would say it this way: I work as a university lecturer, as a member of the Institute of Educational Technology which I think is most unfortunately named, since it sounds like slide projectors and things. I work in communication in learning, I tend to work, well I work hard on course design and I specialise in the early stages of course design - the stages where all the important decisions are made that really matter, the ones that kind of get just muddled through without clear planning and thinking. I work to make things learnable and to make the process of course design more efficient and less painful.

CURRENT TOPICS IN THE NEWS

INTERVIEWER

With respect to the items in the news which we discussed, how interested are you in these items?

BEN

Very little, to me, I can't afford to feel threatened by the things that are going on because there is very very little that I can do, um . . . any action that I take to avoid that, I can't run because the state of the world is such that there is nowhere to run to. um . . . The things that I see happening on the telly are really a constant play over and over of the quite standard conflictual process, all that happens is the content changes day by day, the process remains exactly the same and in my view is um . . . unnecessary, but it is only unnecessary because I've done a lot of (in my view) because I've

done a lot of hard thinking about how to proceed otherwise without rendering oneself ineffective in the process, I mean there are lots of ways of being kind that make you look like a stooge you know and so on. I would regard it as unnecessary because I know that things can be done better, I've experienced them being done better, I've done them better myself and I've read about other people doing them better and how they do it and now and again, I see other people doing it better and it's a matter of understanding ones own process needs and interacting with other people and with ones environment so that one can manage (not manage the process in a manipulative sort of way) so that one can avoid blocking it and help other people to avoid blocking it as well, and um . . . so I you know, don't watch the news with any major interest, it's a . . . mainly what you would call bad news. If you watch too much of it you actually, in my view, get kind of contaminated, it does seep into you and makes you very pessimistic and then you can't do anything constructive. I tend to take the Chinese view: they have a world for opportunity which combines the meaning of danger - oh they have a word for crisis, sorry, which combines the meaning danger and opportunity

INTERVIEWER

Which is?

BEN

I think it is woo wey and the um . . . I think that we are in a situation now where as a race shall we say, we are going to have to learn to communicate better and won't be putting in the effort that will be required to learn to do so, if we weren't so threatened, some of us; the threat is causing some people to amplify the threat and feed it back, it's causing other people to say "what the hell can we do differently and a lot of it is only because of that threat from which we're just going on and learning how to proceed differently, how one can proceed differently, um . . . so most of the information that I need in order to proceed differently does not come from the telly, the telly just tells me that nothing much has changed at least on the surface in the way things are proceeding in the

general world and certainly in what the B.B.C and I.T.V editors are thinking ought to be reported, so I regard it with considerable contempt actually, what is presented on the screen, I mean it's. . . it's . . the sort of thing I mean, like I guess it was on Panorama, that was just showing Vietnam - bleeding the country dry you know, and I look at that and that I don't regard with contempt - that's tragic, um . . what's happening to the people there. I regard with some contempt the power politics that are causing that to happen. I regard with pity now the belief that you can do anything constructive towards making people feel they're split off from each other, and making people feel, or allowing them to feel more like working with each other and for one another through the use of military or economic power that are fundamentally coercive in my view and fundamentally self-defeating. um . . so you know I read the news now and again just to keep tabs, but I don't read it avidly any more I'm very very selective and the general news media do not provide me with the information that I need in my view, to act in any effective way, any constructive and effective way. I get that information from other sources entirely and um . .

INTERVIEWER

So you wouldn't say you were well informed then would you?

BEN

No there is much that goes on in detail, which for me is merely the playing out of the same process over again with different characters, I couldn't care less except in so far as you know, it provides an added incentive to do something whatever I can to try and get the plot changed, that's all you know, the stuff does not interest me intrinsically, not at all. Things that have to do with the gaining and manipulation of power, seem actually to me to be a fundamental turn off. I mean I just couldn't care less. . . .

I sometimes wonder whether people who do enjoy doing that really enjoy it intrinsically as a creative act, or whether it is only their way of feeling that they can keep ahead of the rest of the world.

INTERVIEWER

Possibly. O.K. Ben thanks very much.

EN

Is that the end of it . . .

Interview with BertramlandINTERVIEWER

Right then Bertram how do you see the present situation in Poland?

ertram

What do you mean by how do I see it? I don't quite follow the question entirely.

INTERVIEWER

No it's very general, it's meant to be general but, um.. do you see that the situation in Poland has dramatically improved from a few weeks ago?

ertram

No, I don't think objectively that it has improved. When I said that I didn't understand exactly what you meant by how do I see the situation in Poland, is this, that I could imagine a number of different ways of answering your question, I mean, one could say "well I see the situation in Poland as pre-revolutionary, you know; one expects some kind of overthrow of the Polish state, that would be one way of saying that I see it by looking forward to some situation, right. Another way of answering your question of how do I see it, is to say " well I see it as a culmination of historical tendencies and these sort of historical tendencies, nationalism, catholicism, the inability of the Communist party in the past to impose a moral authority on the Polish people and it seems to me that there are two entirely different kinds of ways of answering the question - how do I see it? so I suppose I see it in both ways really, both as a culmination of historical tendencies and as a preliminary to some major alteration in the relationship between the state and civil society in Poland.

INTERVIEWER

How important do you feel that the historical or historic background or development of Poland is in that situation?

ertram

Well it's not just how important is it, as it were, I mean the present couldn't be there without it. I think that's all I would say to that you know. It's like almost saying, how

important do you consider photo-synthesis to the reproduction of plant life, like it can't get along without it, and to ask how important is the historical background is um... I don't think is a very interesting question really as I think the historical background is indispensable I don't think that undercuts my first response to say that there are at least two different ways of trying to answer the question as I see it.

INTERVIEWER

Have you got any first hand information about the situation in Poland? For example do you know any Polish people?

INTERVIEWEE

I did have some trivial information when I was driving between Oxford and Birmingham this year I gave a lift to a couple of Polish students and had a long conversation with them. I also have first hand information of a slightly different sort, in that for a long time I was very close friends with a family in Czechoslovakia and it's so... I think the situation in Prague in 1967-68 and in Poland at the moment is sufficiently close, I think the experiences are sufficiently similar to say that I have a kind of though still vicarious, I have some sort of first hand knowledge of what it is like to be an ordinary family, that's an ordinary family living under a people's democracy.

INTERVIEW ON T.V.

INTERVIEWER

Right, to change the topic have you any views about violence in television programmes?

INTERVIEWEE

I don't have any strong views, I um.. on the whole I'm very opposed to the representation of violence but at the same time, I appreciate that some of the most profound cultural products and pieces of culture that we know do represent violence in the very excruciating type. I mean one thinks of the blinding of Gloucester, King Lear so

INTERVIEWER

That was the gouging out of the eyes, who's eyes was it now?

INTERVIEWEE

Gloucester's. So it seems to me rather irrational perhaps adopting a kind of double standard for different classes in society to say that the representation of violence in King

Lear is cultural permissible whereas the representation of violence on television isn't. I suppose I have very ambiguous certainly, ill thought out and not particularly consistent feelings about the representation of violence, I mean, I don't favour the representation of violence, I don't think that's a good thing, at the same time I think that there are probably many um.. television programmes where both the representation of violence in fact or documentary and in fiction is um.. culturally and socially legitimate. So that would be my response.

INTERVIEWER

By violence I was alluding to such programmes as the Professional or say Kojak.

Bertram

I've never seen the professionals I'm glad to say, I've seen Kojak.

INTERVIEWER

Or Starsky and Hutch which is probably more violent than Kojak.

Bertram

I must admit I don't suppose watch them very much, I feel that it's, the violence represented in Starsky and Hutch is um.. absurd because it is implausible and .. in the same way that James Bond is implausible and it doesn't interest me personally. But I try to avoid having any kind of moral or social judgement, I mean I don't see why other people shouldn't watch it if that is the entertainment they want.

INTERVIEWER

Would you regard sport such as boxing or judo as fringe violence?

Bertram

Yes, certainly it is violence of some sort, otherwise it would be um.. disruptive of the English language not to say that they were violence. I mean, they are some sort of violence yes.

INTERVIEWER

Would you say that television programmes and violent behaviour say in the form of boxing, if viewed by young children is a potential aid to violence within families?

Bertram

You're saying young children seeing boxing may be....

INTERVIEWER

Or violent acts committed in a programme like the Professionals or Starsky and Hutch?

Bertram

Well, in a way I think that question is an impractical one and ought to be settled impractically and I don't know what the impractical information is, whether there is any um.. soundly theorised and soundly researched body of work into the effects of.. on children of seeing violence either in the flesh or seeing a representation and um.. I mean I know there has been work done in this area and I'm not sufficiently familiar with it to be able to give it's conclusions, but I think it's an impractical question.

SOLAR ENERGY

INTERVIEWER

Right, at the end of August a fellow crossed the channel using a balloon and solar energy, would you see ballooning as a form of transport in the future?

Bertram

Well it's a form of transport in the present, I mean..

INTERVIEWER

It's a bit of a hobby at this particular stage.

Bertram

Yes but there is quite a lot of money at the moment invested I think by Pirrelli into research and development of um.. I think is it nuclear powered balloons, nuclear powered air ships, one was launched quite recently.

INTERVIEWER

Yes they are more the zeppelin type aren't they?

Bertram

What's the difference?

INTERVIEWER

Well the shape of them.

Bertram

I mean there's no engineering or theoretical difference.

INTERVIEWER

No, possibly not.

Bertram

Well I'm sure there isn't. um.. Whether or not they are going to be a form of transport for the future or not, I suggest

depends upon a number of engineering possibilities upon the sort of relative costs of fuel, upon the kind of margin of profit they would yield for the capitalists who build them.

INTERVIEWER

Do you see solar energy in the form of solar heating as an alternative form of technology, for example, there have been various projects going on in and around the Milton Keynes area with respect to solar heating.

Bertram

Well it certainly is ~~al~~ready, so the answer is yes um.. it is an alternative so I do see it as an alternative.

INTERVIEWER

But I mean it has not entirely caught on in the Milton Keynes development as such, because I suppose there are about ten or twelve houses in the solar court area which were specially designed to having solar heating systems incorporated in their structure, but I mean, but I mean would you for example advocate solar heating in your house?

Bertram

In principle yes because of the less destructive of the environment which again is a conventional reason. But again I think these are really questions which get settled empirically in a sense by I mean if miner's wages go up six times then I've no doubt that the virtues of solar heating will be that much more obvious. Or if um.. we have a catastrophic nuclear accident and then I'm sure the again... That is to say I don't see the question as usefully answered in the abstract - that would be my answer I think.

development of the
third world

INTERVIEWER

Right then how Bertram do you see the development of the third world politically and economically?

Bertram

Do you mean how do I foresee it? What future do I envisage for the third world? - catastrophic one.

INTERVIEWER

Do you?

Bertram

Yes. Taking the third world to exclude China and to exclude the oil rich states um.. I don't think the development of China or the oil rich states is going to be catastrophic, whether I mean I think the third world country. It's a combination of demographic and natural reasons, by reason of their exploitation of the richer half of the world and so I think their future is an extremely sad one.

INTERVIEWER

Can you outline how you see their development for example, politically?

Bertram

Well politically I wouldn't care to generalise because the.. I think there is a great deal of variation in South America I think the norm would be a military dictatorship combined with the most brutal forms of capitalist exploitation. I mean that I think is common place now and it will be even more common place, whereas the possibilities in say India seem um... seem fairly deplorable and catastrophic really as well but it doesn't seem to be quite so obvious that there will be the same type of development in India although it is obviously not that unlikely. I suppose the military dictatorial form of government will be common place throughout the third world or if it isn't military dictatorial it may be sort of religious dictatorial as in Iran. But I mean .. it's not the um.. not just the political future which I think is so catastrophic but also the growing disparity between the tiny elite sort of wealth and the impoverished masses which I think will get bigger.

INTERVIEWER

How do you see the development of agriculture in third world countries?

Bertram

Well I don't think I'm well enough qualified to answer that question accurately but um.. there is I would imagine some possibility that various types of agrarian technology will be exploited to sufficient countries to maintain the masses in a state of subsistence, but that seems to me to be perhaps the least important of the likely developments. A much more likely development is the increase in population pressure on the land

the failure really of agrarian reform to break up the bigger states in South America or even in India - the significant failure of agrarian reform.

HUNGER STRIKERS

INTERVIEWER

Right. Recently the hunger strike has ended in the Maze prison in Belfast up until that stage there was a lot of controversy about whether these prisoners should or should not be given political status. How did you see the situation at the time when the hunger strike was on and did you feel at any stage that these prisoners should have been granted political status?

Bertram

The prisoners have achieved political status, I mean they are obviously not common prisoners and whether they are accorded by official means political status is quite irrelevant to the fact. They don't act like criminals and they behave like prisoners of war. Well not just like prisoners of war but they behave like a different category of prisoner all together and they have achieved political status. um.. and in fact the government dei facto recognises that and grants them.. I think the whole question of political status I think in this particular language in which it is constructed by officialdom actually obscures the reality of um.. obscures the actuality of their quite different status.

INTERVIEWER

- Would you say that they are prisoners of conscience?

Bertram

Well in a certain sense yes. In that they are in prison because they follow... one of the reasons for their being in prison is because um.. they subscribe to a particular ideology and one of the reasons they died as they did was because of conscience in some usage of that word.

HOBBIES

INTERVIEWER

Right. Have you any hobbies Bertram or pastimes, activities that you indulge in outside the Open University?

Bertram

Quite a lot

INTERVIEWER

Things that really turn you on, can you outline any of them?

Bertram

Um.. I'm a fanatical sailor, um.. I like sailing small boats and building them um..and that's my.. major sort of fantasy fulfilment hobby.

INTERVIEWER

Where do you go sailing and what sort of boats do you build?

Bertram

Well, I built a Mirror dinghy years ago and um.. I'm also building an international moth but and then I'm going to build a sailing boat and one of these days I'm going to build a large enough boat and sail around the world.

INTERVIEWER

Really!

Bertram

Well I don't know whether I am but if you put... I'd like to think I was.

INTERVIEWER

Where you do you actually sort of build your boats, down at a sailing centre or at home?

Bertram

No. I built my first sailing dinghy in a hut in a friend's back garden. um.. before I built a boat in it, my friend had been living in the hut and it was only about six inches longer than the boat I built so I worked under very difficult conditions but I sail now on the Solent.

INTERVIEWER

Yes I've sailed there myself actually.

Bertram

Actually, well it's quite irrelevant to your experiment, but I recently sailed and this is an indication of what kind of a madman I can be, I sailed single handed non-stop around the Isle of Wight in my Mirror dinghy. I got up at about four o'clock in the morning to begin it and I got back at about one o'clock at night.

INTERVIEWER

Was that enjoyable?

Bertram

Immensely - to me it was immensely I mean amazing. The only, the kind of.. it was slightly.. there were one or two moments when I was quite apprehensive, but that was where I was sailing for the rocks of the *Needles*.

INTERVIEWER

Yes. I know those rocks - I've actually capsized going around the Isle of Wight myself and being blown into them I think they're called the Needles.

Bertram

Yes that's right they are.

INTERVIEWER

Some ten years ago when I went on Yachting Association courses at Dogmer Creek.

Bertram

Anyway I did a lot of sailing in the Solent.

INTERVIEWER

Why do you like sailing, I mean do you feel at one with your environment or at peace or - away from life in Birmingham you live isn't it?

Bertram

Yes but I haven't lived in Birmingham very long and I've been sailing now for much longer than I've lived in Birmingham um.. although, I mean it is a very pleasant change from Birmingham I don't think any of the things you said accurately reflect the feelings I have, but I would be very... I'd find it very difficult to put the feelings that I have into words um.. I suppose it's a kind of... I like it I think because it's an expression of my physical vitality and um.. I like it because I think It is very beautiful as well. I mean the movement is very beautiful also I um...

INTERVIEWER

It's quite precise and accurate is it not?

Bertram

I don't really think those are very appropriate terms, I mean it does require a lot of skill, judgement but I don't think it's very precise skill and judgement in that sense. It's much more to do with a kind of expression of one's vitality

INTERVIEWER

I meant precise with respect to um.. a great appreciation of the elements.

Bertram

Oh yes I mean it's precise in that sense.

INTERVIEWER

I mean in other words you don't just ignore them.

Bertram

Yes, yes I mean you.. precise also the need to adjudge wind and tide and precise in the need to have adjudged balance but I wouldn't generalise those terms. I mean I think more appropriate adjectives would be - wild, exuberant um... So it is sort of the opposite of apolodian however you pronounce it - Beechian man (laughter) that's what I feel about it also I suspect that, I mean I suspect I find something sexual about it actually, highly sensual um.. yes I think that would be an honest sort of content of it.

INTERVIEWER

Have you any other pastimes?

Bertram

Well I used to do a lot of white water canoeing actually as well which is not... I mean I had almost identical reasons, but all the... those kind of things um. you probably know what white water canoeing is like so in fact it is very similar to sailing and um.. I used to climb mountains, although I haven't done that for some time.

INTERVIEWER

Where was this in Scotland?

Bertram

Austria - not technical climbing just plodding up to the top of alps. I enjoyed that for I think the same spectrum of reasons or not reasons - irreasons. Otherwise I walk a lot, run, do all the kind of normal things I used to go to the cinema a lot but since I got married and had a kid.

INTERVIEWER

Well one can do that at the O.U. on Wednesdays if you're around .

ertram

No I'm not around so it's um....

INTERVIEWER

It probably finishes a bit late if you want to get back actually.

ertram

I don't actually you know, I don't use the O.U. in a recreational way because I've never lived close enough to take advantage of it.

INTERVIEWER

O.K. I'll just turn over my tape.

ADVICE FOR SOMEONE GETTING MARRIED.INTERVIEWER

Right Bertram have you got any advice for someone getting married?

Bertram

No

INTERVIEWER

Would you give any advice?

Bertram

Not in the abstract no.

INTERVIEWER

I mean you do advocate people getting married as opposed to living together.

Bertram

No I don't have any feeling one way or another.

INTERVIEWER

It doesn't particularly matter - you've not actually thought about it or considered it?

Bertram

No.

INTERVIEWER

O.K. Right... um.. can you tell me what you feel your job involves at the Open University?

Bertram

Yes it involves first of all, helping on the preparation of courses I have now been involved with the preparation of four different courses and writing units and preparing television or radio programmes and secondly it involves undertaking my own research. I have a number of research interests which I work on whenever I can and then I suppose thirdly it involves taking some interest in the sort of.. administrative, bureaucratic problems of the University - like marking.

INTERVIEWER

O.K. reverting back to topics in the news - how interested would you say that you are in topics in the news.

Bertram

Very interested - I even find it slightly difficult to envisage anyone with normal faculties who could honestly be said not to in some way be interested in topics in the news.

INTERVIEWER

I mean.. some people don't actually ever read a newspaper.

Bertram

Yes. But there is possibly you know I'm sure quite a lot of adults who don't read a newspaper - they have an interest in the payment of wages the allocation of houses, public transport, the environment policies um.. so everyone's....

INTERVIEWER

How informed would you say you are about current affairs?

Bertram

Fairly well informed.

INTERVIEWER

And your information comes from what - television and newspapers?

Bertram

Primarily through print, I listen to the radio quite a bit, I'd say the radio is more informative to me than television. The Guardian, New Society, New Statesman, educational journals the usual run of intelligent man's reading or whatever. I don't know...

INTERVIEWER

Right O.K. then Bertram thanks very much.

TRANSCRIPT 5Interview with BillPOLANDINTERVIEWER

O.K. then Bill, beginning of the interview. How do you see the current situation in Poland?

Bill

Well I suppose that the first thing that I want to say is that I haven't been following the specifics of it very much, I hear snippets in the . . . um . . . on the radio and I watch television and I read newspapers but um . . . I have a sort of general model of what goes on in conflict situations of this kind and it's to do with the way in which people frighten one another and project dire consequences and um, really box one another in to such an extent that the whole situation tends to escalate and become explosive, so when I read about the situation in Poland I don't tend to look too much or, even remember too much of the specifics, I just seem to think to myself "it's the same old nonsense happening again". um... I mean lots of things are at a specific level one might say, but they always seem to me to be specific incidences of these more general phenomena, you can show how um . . . I mean the appetite tends to increase as people feel they're getting more and more of their own way, they escalate the demands, so there's that sort of element in Solidarity as far as I can see. There's the usual business about what people, politicians, union leaders and so on are prepared to say in public as opposed to what they might be privately thinking, there's the business of people trying to contain the wild men of their party as it were, you know and there are the people there, and there is always a lunatic fringe and trouble makers and so on. But, I actually see this in any sort of conflict, I could go through the same sort of scenario at the Open University and show the same sort of thing happening, because when there is some kind of economic axe wielded at the Open University, you see the same sort of attempts to project dire consequences, to form coalitions to look for allies and to attempt to single out the politically weak as being the

people that ought to suffer, who ought to suffer the most, and so it goes on. So in every situation you'll find that detail is different, you'll find you know presumably the catholic, the catholicism makes a difference in the Polish situation, whereas it wouldn't make a difference in the Open University, but they'll be something similar making a difference at the Open University. So what I'm saying is that as a sort of general view that I have of what goes on in situations of this kind, and um . . . I tend just to nod my head when I read it thinking "well you know it's just another bit of this nonsense being acted out in a different sort of context"

INTERVIEWER

Do you think it is significant that there is a Polish Pope at the moment?

Bill

Yes I think things like that make a difference, just as you know it might make a difference at the Open University that the new V.C. is a technologist and um . . . happens to have a special interest in these government, proposed government schemes for re-training and up-dating technicians, you will always find you know wherever you look you will find that there are certain things of that kind that make a difference, but they probably don't make too much of a difference. um . . . it's hard to know, and I suppose that's another thing I want to say, a lot of the newspapers and the mass media generally, television pundits, speak as if they think they know what is going on, and I never feel that we can know, partly because the public posturings are often very different from what goes on behind closed doors and I think you see that in for example: the Polit Bureau in the Soviet Union, where um it is pretty obvious that there are all sorts of private worries about the wheat crop and whether, and um . . . recognition that they've got to rely on America and Canada and places like that for their wheat supplies. There are things like that which must make a difference they will also be internal jockeyings for power there and they are more like to occur, here again there are differences, the sort of jockeyings for power will be more emotionally fraught I would imagine in a country like

the Soviet Union or China because if you fall from power in those countries you've really had it, whereas if you fall from power in England you just fall back into some cushioned job, and the same is true actually of the American administration, if Reagan gets kicked out of office next time around um . . . well there aren't going to be people hounding him into prison, or wanting to execute him, or wanting to settle old scores and um which certainly has happened in China and is likely to happen whenever there is a change of power in the Soviet Union; there again that's totally predictable because if that sort of thing occurs you'll find that the people in power in China or the people who are in power in Russia will be very much concerned to make pretty damned sure that they keep power and that means they'll be particularly repressive to the opposition and that means if they lose it, the opposition is going to feel that they have got scores to settle, and so you know things are all entirely predictable within the terms of a general model, but you know that there will be differences in the particularities and the emphases in any particular country, so um . . . what was your question again?

INTERVIEWER

How did you see the situation in Poland at the present time.

Bill

Yes you interrupted though ask another question

INTERVIEWER

I just asked if you thought the fact that there was a Polish Pope was important, or would that make any difference?

Bill

Yes, yes that's right, yes that's what led me off on all that tack, I was making a point that all sorts of things like this can make a difference, so being a pope and being a Vice Chancellor who is a technologist or being a Prime Minister or a President in a country where there are very high stakes, being someone like the Shah for example where the stakes are particularly high, um . . . the Shah of Iran that was; I mean you can look in every , in every case there will be a difference that's made but very often it won't make very much

difference because these sorts of conflicts tend to have a kind of inner diaendemic of their own. You can sort of predict that there will be fairly explosive consequences irrespective of who is on top and I mean that's actually shown, I mean the fact of the matter is the Shah got booted out in spite of large numbers of attempts on his part to repress the opposition um . . . you will find the Chinese gang of four got booted out um . . . these things do tend to escalate and again I think there's a general model one can portray that shows the almost inevitability of this and so the only difference that particular factors make is a difference concerning the rate at which it happens.

INTERVIEWER

Yes would you say this could have happened to somebody like the Ayotolha Kohmeni?

Bill

Yes I think that is likely to happen. Again there is a general principle involved but um . . . something the masses on the whole, particularly if they're afflicted with religion, they will tend to want a strong leader who shares their prejudices, delivers certain sorts of goods, and if there comes a time when he thinks that when the masses believe that their leader isn't able to . . . isn't able to deliver the goods, they'll just crucify him, and um that's one reason why you have to get a lot of enigmatic communication and forcification going on, you have to have people at the top (in order to avoid that situation) pretending that things are better than they are, alternatively they have to divert attention from themselves by calling attention to scapegoats, so there will always be some other enemy that they are pointing the crowds in the direction of, as um . . . a way of diverting attention from their own inadequacies.

INTERVIEWER

Have you got first-hand information of what's going on in Poland, I mean for example, do you know any Polish people?

Bill

Well actually the only Polish person I happen to know went to Poland only a few months ago, remarked that although everybody was grumbling about the shortage of food, whenever he opened the fridge doors the stuff tumbles out (laughter)

and um . . it's actually part of what I was saying about not really knowing what is going on. You very often find that certain sorts of situations are almost the opposite of what's the case, you hear quite horrific stories which are bumped up and exaggerated maybe by the media and turn out to be totally untrue, but presumably it's very much in the interests of a lot of people to pretend that everyone is nearly starving and on the breadline and certainly appeal to any anti-communist mass media to repeat this, but, whether it is the case or not, I just don't know.

VIOLENCE ON T.V.

INTERVIEWER

O.K. to change the subject Bill , have you any views about violence on the television?

Bill

Um . . . I haven't really thought about that one too much, um . . my own view, for what it's worth, is that violence I think certainly exacerbates um . . conflict in real life, I think violence on the . . . that there's a school of thought which believes that violence on television doesn't really do any harm, I think it does do quite a lot of harm um . . I think, I'm quite impressed for example: by certain research which shows that after watching um . . that after watching particularly violent episodes, young children will go and smash their teddy bears to bits, I expect you've read about stuff like that and um . . but, I suppose really, it's not the deepest worry I have about television, I think the worry I have about television is that it's totally mis-directive about the nature of reality, um. . what I mean by that is that I think that there was once a time before television when kids grew up and um . . in the real world and got immediate corrective feed-back if they did certain sorts of things wrong, for example: if you are a young kid and you had a bike and you thought you could ride the bike down a bumpy hill, you would have a go and it would toss you off and you'd soon find out that your ideas were wrong about this, but it

seems to me that nowadays kids can watch the box indefinitely and get all sorts of bizarre ideas about the way the world work and actually never get any corrective feed-back because there is no way in which they can actually tell that they're wrong. In fact they will even tend to look for confirming evidence of their right and they'll always be able to see it if they develop a certain kind of selctive perception and I notice that several times when I . . . I watch these debates from time to time and they've been, these particular debates that the B.B.C. mounts when there is some crisis about the cabinet or some trike or whatever and um . . . every one's really delivering their own monologue, they've all got different points of view, they're all contradicting one another and I usually end up not having the faintest idea what I should make of it, and then I talk to people the next day and they say "did you see that programme, wasn't it wonderful? I thought Joe Bloggs won hands down" what's obviously happened is that they've identified with someone, Jow Bloggs just happens to be the person who has a view that is rather similar to theirs and they're seeing him as the winner - hands down of the debate. The point about all this is um . . . if in fact you watch television and you get all sorts of bizarre and wrong ideas about the way the world works, if you see all sorts of things happening in other countries, you kind of get an image of the way in which gangsters behave and the police behave and everybody else behaves under all sorts of odd circumstances, and get totally wrong ideas about the way in which the world works. When you grow up and get out in the world, you then find to your horror that the world isn't behaving in the way that you expect, so you get very frustrated, you next find that everyone else around you is in the same predicament and that they also are finding that the world doesn't behave in the way that they expect, but then there's a catch 22, that these people can't actually agree among themselves about what's wrong because there are an indefinitely large number of ways of being wrong about the ways in which the world um . um. um. behaves and if in fact everybody has got their idiosyncratic

views that have never been subject to corrective feed-back, then they will just be all at odds with one another as to what to do about it, or what is actually wrong, so um . . . you know I have this, I have these real problems about letting children sit in front of the box for hours on end under those sort of conditions. I'm not saying that before the T.V. era um . . . I'm not wanting to say that the children under those conditions never got wrong ideas, but I think there were fewer of them.

INTERVIEWER

Yes have you watched programmes like the Professionals, Starsky & Hutch, Kojak?

Bill

Yes um . . .

INTERVIEWER

Which are fairly violent.

Bill

Yes that's right, I mean that's the kind of machismo man winning through, you know I find it positively revolting (laughter)

INTERVIEWER

Especially perhaps in um. Kojak.

Bill

I mean I was watching King Kong, that classic film last night, I don't know whether you saw it, it was repeated.

INTERVIEWER

No I didn't last night no.

Bill

And there was this huge ape that wasn't doing anybody any harm you see and um . . . they kind of capture this ape and um . . . it's a very corny story, but the ape gets very fond, gets very attached to this little girl who he can kind of can hold in his hand, the girl is actually smaller than the ape's hand, and um . . . there's a scene in which the ape is just strapped with huge handcuffs for public display, and there's a bit of confusion, (I didn't see this bit last night by the way because I only turned on at the very end) but I remember the original film very well.

INTERVIEWER

It was on at the cinema actually up in town.

Bill

Yes. There was a scene in which for some reason there was a lot of argument and a bit of screaming and the ape thought this girl was in some sort of trouble, and so he wrenched and wrenched and actually got free and started smashing up the town, he eventually climbs up the Empire State building, and the grand finale is where all these airplanes are actually homing in on him and shooting him to pieces, and um .. actually that's supposed to be a great story, it all ends you see, it all ends with the person saying "ah yes we got him, the airplanes did it" as if this was something highly creditable, I really get a feeling of great revulsion when I see this kind of violence I think it's a real affront to human dignity. I certainly think that's true of Kojak and um . . the Professionals, they seem to me to be altogether too slick.

INTERVIEWER

The Professionals actually is quite bloody, it goes into a lot of shooting.

Bill

Yes yes that's right, um . . . Kojak is a bit more um . .

INTERVIEWER

Corny gangster

Bill

I was going to say Sherlock Holmes-ish, there is an attempt to piece evidence together, um . . that Starsky & Hutch is another one that is sort of in-between, with the inevitable car chase screeching backwards and forwards. I get the impression these things are written by a computer. Um . .

INTERVIEWER

In actual fact the news, the B.B.C. or I.T.V. news can be quite frightening with respect to violence, especially when it was giving accounts of violence down in London or Toxtieth, one wonders how much the media like television should actually show the general public.

Bill

Yes the um . . . I think this tendency for the mass media to revel in um . . . bad news and um but it presents the news

without, it seems to me, any insight into what the processes are, I think there again the sorts of escalations that you get, are violence and racial prejudice and so on, um . . in places like Brixton and Southall are totally predictable, you can't predict precisely when, it's like car crashes, you know you can actually be quite certain that there will be car crashes from time to time and there will be knock-on consequences, in a sense that one car is likely to telescope into another and that sort of thing, um . . I think people are terribly un insightful about the processes that give rise to these sorts of conflict and that's nowhere touched by the mass media as a whole, what they tend to say is "look at all this violence isn't it dreadful", they tend to move into a judgemental stance, rather than an understanding stance and the emphasis is on "this is terrible, let's make sure it doesn't happen", you get the kind of 'heads must roll' headlines, where someone is a scapegoat again, you see you may just as well be scapegoats in the Polish situation, or be scapegoats looked for, it maybe the National Front, it might be the Police, all sorts of things, it's a standard . .

INTERVIEWER

It might be a racial issue if it was done in Brixton or . . .

Bill

Yes it might well be.

INTERVIEWER

It's a hot-house for sort of racial discrimination, that part of London.

Bill

Yes, yes I think there is probably a sort of threshold effect, it's almost a case of, if you get.. if nine per cent of the population is coloured nobody seems to bother, if nine and a half per cent are coloured nobody seems to be bothered, but if ten per cent are coloured all hell breaks loose. You do get these threshold effects, but these are what I call last straws, you know people are kind of inwardly worried about the situation and there comes a point when they feel they've got to do something about it, and there's a sort of mass hysteria

and the imitations and so on. These are themes that run right through the whole process.

INTERVIEWER

Yes the racial pot sort of simmers down in Brixton most days of the week and it just needs something to bring it up to boiling, if anything really, any excuse for violence

Bill

Yes I mean there's lots of occasions when it seems to me that the mass media are almost inviting it. I remember there was a time when for a week or two before every holiday the mass media was speculating on whether the teddy boys would swoop down on Brighton again and have a punch-up on their motor bikes, now it seems to me that if you keep people in jobs, in sort of dead-end jobs with no satisfaction and so on, or just keep people on the dole when they haven't got the inner resources to be able to cope with the boredom, it seems to me to be hardly surprising that you get an explosion now and again, um . . . people don't tend to think like that, they tend to think "oh well you know, they're getting money for doing nothing" and "they should be grateful instead of kicking up a fuss" they actually don't understand about the psychology of people.

INTERVIEWER

Would you say that sports like boxing, judo and karate, which are given fairly wide coverage by television on Saturdays aid, or called be called fringe violence?

Bill

Yes there's the same kind of machismo prowess about it all I sometimes get this feeling that, that the mass media is obsessed by a kind of prowess, whether it's Wimbledon, athletics swimming, judo, boxing, in the first place the press is very much oriented towards celebrities, if you read through the newspapers you will find they're all about celebrities, in fact, even if someone begins as a nonentity, they have to bump him up into a celebrity in order to go on talking about him. So the press - the newspapers largely are about celebrities and what celebrities are doing, and there seems to be two modes, there is the kind of cheering mode if the celebrity is doing well, and a condemning mode if they are doing badly, so you find that Boycott is in disgrace one week because he

has failed to score, and he's the hero of the cricket team a few weeks later when he saves the side, there's a kind of funny orchestration of disgust that goes on in the media, um . . there are all sorts of feelings, you know hopes and fears are mobilised, there is this orchestration of disgust and um , the hypocrisy, the hypocrisy of newspapers like the News of the World for example, that actually only sell on the basis of the titillation that they report, but reported in this orchestrated, disgusted way - isn't it dreadful, here's a man in a high position watching blue movies or something of the sort and they go into detail about what the blue movies are, so that people will buy the paper next week. It's an incredible situation that the um .um . . I don't really see much difference between um . . athletics, you know the kind of prowess running a mile a second shorter than somebody else, or winning a world boxing championship, it seems to me that they are all subscribing to the same erroneous and mis-directed value system, they're all kind of giving people the idea that you've got to achieve, you've got to be somebody, so um . . I think you know, the issues are a bit deeper than just the violence of the matter.

INTERVIEWER

Would you say that the violence in television programmes and say in the news and sports like boxing which are fairly violent, aid violence in home situations?

Bill

I suppose they might do, one of the troubles about home situations is that people really feel trapped, they can't see how they can get out of the situation and they can't actually stand the situation that they are in, and um . . um . .

INTERVIEWER

I suppose it actually depends on the family set-up, if one is very selective in what one views, you could switch off things that are too violent.

Bill

Well I'm actually. . I'm ridiculously optimistic about television, I always assume that programmes are going to get better, it never does and um . . I find myself watching

things like Starsky & Hutch and hating myself for doing it, you know, I find it's a kind of split attention thing, I wonder what the hell I'm doing watching another dose of this rubbish, but I go on watching it, (laughter) it's a sort of dreadful hypnotic effect, um . . . I certainly wouldn't want to blame television for all the ailments of the world, I think there are quite deep things that they do, like giving people wrong views of the world, but um . . . if for example: a frustrated husband watches a boxing programme, it's not obvious to me, in spite of that research about teddy bears, that he is more likely to thump his wife that night, um . . . it's just that um . . . it seems to me to be a very strange thing for humans to do, it's like watching bull fights, you know, I always feel much more worried. . . a lot of people say "poor old bull", but, I actually feel sorry for the humans who actually find that sort of thing interesting.

INTERVIEWER

I must admit that I did find bull fighting quite interesting about ten years ago, I watched about fifteen bulls being slaughtered on a Sunday afternoon in Spain.

Bill

Yes well it's part of the standard thing that's laid on out there. I suppose that I keep on coming back to the same old point. I don't think people realise what these things do to them, it's a very um . . . but um . . . there are some things I like, I occasionally watch wrestling because I find it very funny and they occasionally hurt one another by mistake.

INTERVIEWER

Do you find it grotesque?

Bill

Oh yes it is grotesque, I find it grotesque in a funny sort of way actually, it's obviously almost entirely spurious (laughing) they'd quite obviously kill one another if they were playing it for real, so there must be all sorts of things that are done which um . . . in fact you can see them sometimes, you can see them sort of pretending to stamp on the other person's hand, and just missing because they are sort of stamping with their. . . with the foot at about thirty degrees from the floor, as it comes down..

BALLOONING AND
SOLAR ENERGY

INTERVIEWER

Right to change the subject Bill, I think it was at the end of July or the beginning of August a fellow crossed the channel using solar energy and a balloon, do you see ballooning as a form of transport in the future?

Bill

I certainly can't see ballooning as a conventional form of transport, it's too unreliable, I think it must be a very nice experience and I happen to place a high value, most people do on silence, and one of the few hobbies that I thought I would like to take up from time to time is gliding, because I think that must be a really beautiful experience and um . . . the sensory experience must be very nice and the silence must be sheer bliss, but certainly a way of getting away from the turmoils, the chatter of the every day world, so I would actually say that about ballooning, I may be quite wrong of course, it may be that if you have a hot air balloon then it's one of the . . . it might be terribly noisy if you've got this um . . . this um . . . hot air device blasting away in your left ear all the time, so I might be quite wrong about it, but um . . . I have this vision of ballooning as being something very peaceful and being a nice sensory experience. If that were the case I think it must be quite a nice thing to do, quite a nice thing to engage in but um . . . apart from that I don't think I have anything to say about ballooning at all, it would otherwise be just another hobby to me and so once again I would . . . I have some general things I could say about hobbies, but um . . . which are really to do with things like getting away from the turmoil into a world that you really feel that you can control, as opposed to a world which is all the time threatening to get out of hand, um . . . the um . . . the um . . . I suppose there may be other things about distinctive hobbies, there's always something special about a hobby like ballooning which isn't done by many other people which is kind of . . . um . . . it's always an interesting talking point, I can't imagine people being terribly interested in talking at length

with people who collect stamps, but I can imagine they might be quite happy to talk at length to someone who goes ballooning because there are all sorts of interesting stories, I imagine balloonists must be quite, quite um , , quite good with humorous anecdotes about where they land and what goes wrong, because I do have a couple of friends who go ballooning and it seems a pretty hairy sort of game to me, they have to be followed by a motor car all the time and um . . um . . there are problems about pylons and cables looming up, problems about where to land and so on, and so I really can't think of anything else to say about balloons.

INTERVIEWER

So obviously you don't see it as a form of transport in the future, it's merely as a hobby or an interest?

Bill

No I mean I think that, I think that um . . . I believe that it's quite likely that um . . . that, that these zeppelins or whatever they are called, oh hell what's the name, you know these big sausage things

INTERVIEWER

Well you're right they were called zeppelins originally

Bill

Yes I think that might be rehabilitated if you could construct them so they are not filled with highly flammable material, I think that must be nice as well, but I can't see ballooning being anything other than a hobby in the years to come, but imagine it would be a very nice one.

INTERVIEWER

The main interest was the fact that it used solar energy cells, obviously solar energy has caught on in the form of sort of solar heating up here in Milton Keynes, are you interested in this alternative form of technology?

Bill

Yes I don't know how reliable it is, um . . . I mean the point about ballooning the way I understand it, perhaps I'm just plain wrong because I haven't got all that much inside information, my understanding of ballooning is that it's not very

reliable because you're very much at the mercy of the way the wind is going, (laughter) so I don't see much point in clabbering into a balloon to get from London to sort of Birmingham if the wind is likely to change half way through the journey, seems to me that it couldn't conceivably be a reliable form of transport. The whole point about ballooning as a hobby is that is part of the enjoyment, you never know where you're going to end up. On the matter of solar cells, I think there are lots of these energy conservation devices which look quite promising, I'd be interested to know how promising they are actually because it does require a great deal of energy to actually produce the solar cells, then it requires energy to make the balloons, it requires energy to construct them and so on and I don't think these energy equations are ever properly worked out, people will say for example that the bicycle is very economic with energy but you actually can't ride a bicycle except on a very flat preferably paved surface, so you've got to have energy to produce the concrete and to lay it and so on and so forth, and if you take all those things in, it may be that you are using up a tremendous amount of energy to provide people with bicycles and um . . . I don't think these energy equations have been done, where they have been done incidentally they show rather curious results. Peter Chapman in the energy research department has shown to his satisfaction anyway, that you get less energy out of a nuclear power station than you actually put in to build it and by the time you actually process the uranium shale and transported it all of which costs energy, the time you have expended enormous amounts of energy on building nuclear power stations itself and the further energy on running the thing having regard to the fact that the nuclear power station only appears to have about a fifteen year life, um . . . he calculates that you end up getting less energy out than you had actually ever put in. But that might be the case always, it's not obvious to me how you can ever have anything which gives out more energy than you put in, so I just don't know how the equation would work

THIRD WORLDINTERVIEWER

out, or how valuable they are.

O.K. thanks Bill I'll just turn over the tape.

Right to change the subject, have you got any ideas about the development of the third world politically and economically?

Bill

Not really, I suppose I am. . I mean the first thing to say is that I don't really know much about the third world or what is going on. The bits that I have read make me on the general principle rather suspicious, it seems to me that there are a lot of people trying to sort of muscle in on the help for the third world, with a view to making a killing of some kind, either extracting the mineral resources from the country, or alternatively selling their technology or their services in some fashion, um . . I did follow at one time a kind of a 'small is beautiful' stuff of Shomarker and others and I did suspect that there are all sorts of things that could be done for the really under developed countries which would be a lot more sensible than um . . the things that are being done by these sort of self-appointed do-gooders, so I am a bit suspicious about the whole thing um . . there seems to me to be a general assumption that the way to develop the third world is to make it more like England than the British Isles (laughter) and um . . if that was the objective I'd have a few worries about that as well, um . .

INTERVIEWER

By do-gooders do you mean um . . organisations like Oxfam, Tear Fund is it?

Bill

Yes I think a lot of it . . there are the business men of course, there are politicians that want a slice of the action for all sorts of reasons and politicians usually have quite strong associations with business men, commercial organisations, they're often directors or advisors, so they are kind of putting business in the way of these people, so there may be all sorts of personal agendas of private gain and so on, for holding political meetings with a view to trying to help out the third world under the certain circumstances. Then there

all the missionary types - the Oxfam types, missionaries who are convinced that there are souls who need to be saved. I'm not quite sure what Oxfam is about, I've never been really clear, I mean I know what they are supposed to be about, they're supposed to be about providing minimum aid to the um . . the most needy in terms of giving them enough food to keep them above the starvation level and enough clothes to keep them warm and so on, um . . there's an enormous amount of corruption associated with that apparently, whenever goods reach these other countries there are always people who pick off the stuff that is worth having and it is not at all obvious that the . . that more than a small percentage of the aid actually reaches the people who most need it, but um . . there are lots of worthy . . . it sounds very cynical to say this, but there are lots . . it seems to me there are no shortage of worthy causes, but one really needs to ask whether they're the things that matter most, I mean, it might well be a worthy cause to promote vegetarianism or the abolitions of experiments on animals and so on, but um , you know one can see that these are worthy causes in some sense, but in another sense it could be fiddling while Rome is burning, it's just not attending to the things that matter most, so there may be people who have given their whole lives to certain good causes, like not killing foxes, um but um . . I have mixed feelings about um , you know whether that would be a life that was well spent. There are a lot of things that happen in so called primitive societies and un-developed societies, that seem to me to be very much better than what happens in the west, the pace of life is much more leisurely for a start, and um immediately you start tinkering with um . . with the system and trying to develop it, that usually means industrialisation in most people's eyes, and then you get cities, slums and brothels and prostitutes and that sort of thing, and it happens time and time again when you try to industrialise these um .. under developed countries all sorts of things go wrong and people just don't um . appear on the whole to be

any better off.

INTERVIEWER

In actual fact it wouldn't necessarily be wise to change their whole cultural set up in some of these countries?

Bill

No I don't think so there's um . .

INTERVIEWER

They're creating more problems in actual fact?

Bill

Yes I think in the very attempt to create order people then create disorder, but um . . um . . and there tends to be a whole lot of mixed motives, some people are just in it for what they can get out of it, a Nobel prize or um . .

INTERVIEWER

Are you referring to Mother Therese of what? Calcutta or something like this?

Bill

Well yes I don't suppose that she was in it for the Nobel prize actually, um . . there are some Nobel prizes that seem to be given very easily like the one that was collected by that Irish woman who sort of set up this peace movement in Northern Ireland,

INTERVIEWER

Oh yes she's quite young, she's in her mid twenties . . .

Bill

Heaven knows why they gave the peace prize to Begin and his little . .

INTERVIEWER

Bernadette Devlin you're talking about

Bill

No no, Bernadette Devlin is a politician isn't she?

INTERVIEWER

Yes she's now married now she's . . .

Bill

No no this was some housewife in Ireland who started some peace movement and um . . picked up a Nobel prize and about twelve months VAT (laughter). It's a rather ridiculous award anyway the Nobel prize but um . .

INTERVIEWER

You'd better let me know her name and address (laughter)

Bill

Yes well, I mean she just became an eye catcher, that was obviously just a political award just as the award of Begin and Sadat's Nobel prize was, I suppose they felt that there might be a stronger motivation for them to keep the peace if they got the prize, but it didn't work out that way, they just pocketed the money. Um . . now where were we - the third world.

INTERVIEWER

Well just altering the cultural patterns of particular countries, or even trying to industrialise them for example might just be a drop in the ocean.

Bill

Yes you see there's a book that came out recently, I forget the name of it, it was about the Mayans in South America, MAYANS and there are little pockets of these that retain a very simple, civilised, dignified life um . . you know more or less in the backwoods and um . . it's interesting, it describes in some sort of detail the way in which they have managed to preserve this very easy going civilised culture in the face of more and more industrialisation and um . . it's um . . it's a very moot point whether these attempts to develop the third world, actually do them more harm than good, I suspect they do on the whole.

HUNGER STRIKERS

INTERVIEWER

Something different, I expect you remember the hunger strikers on hunger strike in the Maize prison in Belfast, um . . they were striking in order to get political recognition, political status, um . . have you got any views about the hunger strike?

Bill

Well, not really except that I see it as the same kind of extortative game that goes on um . . it's not unlike, in terms of my general image, of what goes on in these situations where there is a sort of jockeying for position and political advantage and sort of bringing pressures to um . . establishment pressure groups, bringing pressures to bear on various people, it seems to me to be just another example of the sorts of

things that are going on in Poland, and the sorts of things that are going on in the Open University, it actually, it's um . . you know as I said before the um . . the um . the details of it, don't seem to me to sort of matter very much, they obviously matter to the people who died, I'm not suggesting

INTERVIEWER

Ten of them I think

Bill

Yes that's right, um . . . but I mean they would, they seem to me to be very much pawns in a game and they may in fact, have been um . . what one really doesn't know why they did it, or why it was that they kept on doing it until they died, presumably there were all sorts of pressures put upon them, although I think it's true to say that when you've stopped eating for a certain period of time, it becomes very easy not to eat thereafter because you lose interest in food, I think you feel ravenously hungry for a week or two and then the feeling goes, you're just gradually debilitated and actually your resistance begins to deteriorate um . .

INTERVIEWER

Well they went for periods of about was it fifty six or sixty one days something like that.

Bill

Yes something like that because they were taking water you see, they were taking water but not food, if they hadn't taken water either they would have gone very much quicker. Presumably they were invited to take water just to get the maximum mileage out of the publicity. Um . . I think it's pretty horrific that people get treated in that way, but um . . I think it's pretty horrific the way the mass of the people treat most people um . . it just happens to end in the death of somebody but it could just as easily end in the imprisonment or character assassination and so on, there are all sorts of ways of um . demolishing the opposition, demolishing people generally in a society that's pretty demented.

INTERVIEWER

In actual fact some of their demands have been met haven't they?

INTERVIEWER

I don't think they have in actual fact been given political status.

Bill

Yes I mean there will um . . . they haven't been given political status, I think if I remember rightly some of the details, that they were allowed to wear civilian clothes and so there have been little concessions of various kinds but um . . . but one doesn't really know, one can't really know what is going on behind the scenes, there may be some reason that Margaret Thatcher & Co wanted to do some sort of deal with the Irish government and one doesn't know whether it's anything to do with that, um . . . One also knows that there were various people like Kennedy in America who were getting frothed up about the situation in Northern Ireland, so there may be other problems of that kind which led politicians to think they might make the odd concession, and so it may have done some good, it's just a crazy way of going on really. Um . . . as I said before I regard the . . . I tend to have a different view about this from most people because people argue about the pro's and cons of you know Protestants and Catholics and so on

INTERVIEWER

Yes that's right the religious argument

Bill

And um . . . my stance here is that any kind of ideology, whether it be religious or political is essentially divisive, so why people are arguing the toss about whether the Catholics have got a better case than the Protestants, I tend to think that it's religion per se that's causing the trouble. Like the similar sort of trouble when people argue in the O.U. about the tory government and the socialists, while someone is trying to convince me that the socialist policy is better than the tory policy I'm privately thinking "well really what's wrong, all the divisions in the world are precisely because politics are around and religious ideology - isms of every kind" any kind of ism or ology actually is a potential source of division and conflict and when you get the kind of leader like Paisley who can create real mass hysteria, you're in

double trouble because you are in to this escalating thing again and you're into the sort of situation where people feel that they can't backtrack without losing face. Thatcher's exactly the same situation, she feels that though she might be sufficiently biggoted to believe that her policy really is going to work in the long run if she tries hard enough, but you can never tell I mean all the . . . really there's no point in trying to tell, the only thing you can do is to call attention to these general sorts of tendencies and see that this is yet another example of it.

HOBBIES

INTERVIEWER

Have you got any hobbies Bill, or pastimes which you indulge in outside of the Open University?

Bill

UM. . I don't really have any hobbies at the moment, I haven't had what I would call a real hobby for years. When I was a kid I was a demonic chess player and I composed chess problems as well, I composed several hundred chess problems which appeared in various newspapers from the age of about thirteen onwards and um . . I came second in the British boys chess championship when I was about sixteen or seventeen and um . . I really abandoned it round about the age of twenty two because I realised that it was just too time consuming that um . . it's the sort of thing, it's a bit like tennis you know you go on knocking about, but if you decide that you want to be good it just occupies your time totally and I think it was Pollier who said that "there are people who have problems and there are problems who have people" I think it's very easy for hobbies to almost take you over almost completely and um . . if you want to give your life to that sort of activity then that's fine, nowadays of course, it is possible if you are a good chess player to make a fairly reasonable living out of it, you can act as a chess coach and you can get paid for demonstrations, displays in public and you can get paid for running chess columns

and writing chess books, so there are about twenty or thirty people in this country who make a reasonable living out of it and quite an enjoyable one, there are several chess correspondents in the um . . at the world championship matches in Merano right now um , so um . it's a fascinating game - chess and um. . I still play friendly games from time to time, but I stopped playing tournament games years ago, um . . I think one of the attractions of hobbies as I remarked earlier, is that they actually get you away from the turmoil of life, it might be domestic turmoil or it might be work turmoil, or you know, it might be the case not dissimilar from someone going off to the pub to get away from the wife and kids, there's just so much uproar they have to get away, but there's something special about hobbies, though it seems to me that they enable you to get the experience of what I call controlled novelty, that if you have a hobby like chess or stamp collecting or underwater um . . underwater diving or ballooning or whatever, or even going to the theatre, it seems to me that you repeatedly get the enjoyment of new experiences, you can always perceive something novel, and the reason one goes on playing chess and making chess problems is that you see new wrinkles all the time and the reason that you keep on going to the ballet is because you get a slightly different experience each time, so you keep on getting the enjoyment of novel experiences but it's never the sort of novelty that's frightening or getting out of hand, so you're learning in a non-frightening situation, you're learning all the time, um . . under circumstances which are essentially enjoyable and non-threatening and non-coercive, I think that's one of the things about hobbies that really gets people; it certainly is true for example: of gardening, I mean people certainly do get terribly ratty if the frost gets their favourite roses, but at the same time they will blame themselves, I mean essentially, what's happening if you've got a garden, is that you keep on getting the enjoyment of new experiences, you pick up new tips, new ways of growing things, new ways of protecting plants, there's something new happening

all the time and it's happening in an environment which is never threatening because you feel you're in charge of it just because it is your hobby, you actually know about chess, you actually know about gardening, you actually know about the ballet, and the other thing about hobbies of course, is that it gets you into an alternative social system, so that you actually meet different people. I do happen to think that there is a difference between what I call a one subject man and a two subject man, um . . one occasionally encounters a mathematician who just knows nothing except mathematics and he often seems to me to be a very inward looking individual, whereas if you find someone who is a mathematician and also a good violinist it seems to be a person of a completely different calibre, and I think one reason for this is that you really need at least two different social environments in order to be a sort of interesting fuller person. In the case of chess for example: after I published my first few problems in the Evening News at the age of thirteen I got a little letter from the secretary of the local chess club saying would I like to go along, and I was quite overawed by this and he was a nice man, he met me with a very patronising look on his face, and said "well let's have a game son", so I sort of sat down expecting to be demolished very quickly and I beat him in about twenty moves, and I saw him sort of shake his head "yes you're quite good, I'll have to take you seriously" and I beat him again, and this happened I actually went around the whole damned club and there was only one person I couldn't beat and I was astonished by this because um . . they were quite elderly people, I mean of course, when you're thirteen everyone over twenty was old, but my recollection is of people kind of sort of forty, fifty, sixty in the club and they had been going to the club for years and they had obviously never got better, so I was actually very puzzled by this phenomenon and um .. but it got me into a totally different environment, there was the school environ-

ment and there was this totally different world of chess players and um . . one thing that happens of course, is that you find yourself explaining one world to the other world, you find yourself talking to the chess players about school, and to your schoolfriends about chess and um . . it seems to me that this must create a certain kind of balance um . . so I think that nowadays I would say that my hobby is just pursuing these research interests of mine which I don't have time to do at the Open University, things like you know nature of error, I would regard that as a hobby and it actually comes so close to real life in my case that I don't find it possible to distinguish between talking shop and not talking shop, um . . to me everything to me is shop if you like, you know whatever I'm doing I have that same kind of intellectual interest in it, not that I stop talking intellectually, um . . I may sound as if I've stopped talking intellectually, my own subjective view is that I don't really change whether I'm talking to people conversationally, I'm not aware for example that you know here's a point where I just talk about the weather, here's a point at which I talk about something totally sort of different from my interests.

INTERVIEWER

You haven't got any sort of physical activities that you indulge in?

Bill

I'm bone idle physically, um . . I've never engaged in any um . . I've never engaged in any sports, I've never actually had any team spirit. The day I left school I walked around saying goodbye to the teachers and when I came to the sports master he said "I don't think I know you" I had to say "yes we haven't met very often" (laughter) um . . I um . . have never been interested in sports, I was forced to engage in certain kinds of athletic activity when I was in the R.A.F. and did my national service, I couldn't get out of it then, but um . . I've never actually engaged in anything terribly energetic, in fact, I don't even play chess except with very light pieces (laughter) um . . when I broke my leg I was advised

to do lots of exercise and I'm afraid I didn't do the exercises, but as it happens the exercises don't make any difference because in spite of what physiotherapists say, the exercises basically only speed up something, only speed up recovery, they don't make any difference to recovery and non-recovery, so the fact that I now walk a bit like Donald Duck is really nothing to do with my laziness, it's just that my legs were broken and wrongly set (laughter)

INTERVIEWER

Are you interested in your house or your home? - decorating.

Bill

I am quite keen on that, I don't do a lot of it, but that's more because of time and other things and when I married for the first time years ago I actually. . we had a small flat and I did everything, I rewired the whole place, I had to decorate it all the way through and I found it was something quite satisfying about doing that, there are things, it is quite satisfying to do things with your hands like that, but um . . and from time to time I you know, if the weather's fine go out and cut the lawn with an electric lawn mower and do odd things about the house but really we tend to get people in to do the big things now, and um . . we also have an odd job man who is partly a friend who comes around and does things for us in return for about half a bottle of whisky or whatever it is he gets through on each visit.

ADVICE TO SOMEONE
GETTING MARRIED

INTERVIEWER

O.K. thanks Bill , have you got any advice for someone getting married?

Bill

Umm, well I actually never give advice unsolicited unless I've . . I might give what I think a warning unsolicited, if I see someone heading for real trouble, but um . . on the whole I try not to give advice unsolicited unless there's

a special kind of relationship where I'm expected to, I mean if I'm supervising a Ph.D I'm sort of expected to give advice (laughter) and I will give it, but um . . when it comes to personal matters I usually try to avoid giving advice because, as before, I don't actually believe it's possible for an outsider to know what is really going on, um . . the um . . I occasionally read these advice columns in the women's magazines you know,

INTERVIEWER

Oh yes Woman's Own and Woman.

Bill

Yes that's right and whenever I read it I always get terribly worried because I can think of at least a dozen scenarios in which the advice that's being offered would actually be counter productive, you know I can think O.K. if that person takes that advice and the man is of this kind then he is going to make things worse, and um . . I happen to be a trustee of the London Youth Advisory Centre which is run by Faith Spicer and actually gives advice, gives marriage guidance and advice to teenagers and others on psycho-sexual problems and um . . when I talk to Faith Spicer and the others I just marvel at where their confidence comes from, um . . I just don't know why on earth they should think that their advice is actually worth having most of the time, but what tends to happen of course, is that people come and I mean obviously, if people actually ask for advice, you've got to give it, I mean it's rather odd to set yourself up in the advice business, but if people do that and people come for advice you actually have to give it, but um . . and um often the people don't worry if the advice is not to their liking because they go on shopping around for advice until someone tells them what they want to hear and then they heave a sigh of relief and take that and really they've passed the buck, they've sort of absolved themselves from responsibility so they may well . . I mean often requests for advice have got that ethos about them that um . . they are kind of signalling to you what they exactly what they want you to say. But um . . on the question of people getting married um . . I would be

hard put to give anybody gratuitous advice, I mean obviously I would make the sort of friendly noises that people expect you to make if they say they're getting married you say "oh that's nice, or congratulations, or I hope it goes very well" but I um . . and there are certain specific kinds of things that I might be able to help them with, if they were to say for example: we're getting married and we are looking for a house" I can actually give them some quite useful advice on how to avoid some of the pitfalls of buying a house because um

INTERVIEWER

Yes that's quite handy

Bill

They might not know for example just how incompetent the average surveyor is, who to call in, or how much he is going to charge them for doing his incompetent job

INTERVIEWER

That's more to the point yes

Bill

Um so you know there are certain technical things that one could advise them on but um . .

INTERVIEWER

Maybe I should have said recipe for getting married

Bill

Recipe for getting married, well you see I actually think that um . .

INTERVIEWER

If you think of it in terms of say a system, or a plan

Bill

A which sorry?

INTERVIEWER

A recipe or a system or some sort of plan

Bill

A system for getting married well, the reason that I wouldn't want to loom into that advice giving game there is that I think a lot of the major problems to do with getting married these days are actually sex problems and on the whole, if there are for example: problems between husbands and wives, it may be that they're sexually incompatible in some way, but they actually aren't going to tell you

that, they're going to tell you about the fact that the husband never pays any attention, or pushes off to the pub, or does this, that, or the other, and um . . my own private view about the matter is that there are at least four kinds of male and four kinds of female, and the kinds of relationships that they will tend to form will depend ... and the likelihood of them surviving will depend on the kind of person they are, I could give you some pretty strong predictions about the likelihood of a handsome film star marrying a very attractive girl and um . . you know the chances of that surviving are about one in a hundred I should think, but um . . . it seems to me that at the male level there's what I would call the dead normal, no gender conflict male, then there are a couple of kinds of male who do have internal gender conflicts and these are roughly the skinhead types, the hippy type, the skinhead type is basically a person who is really trying to prove again and again that he is a full bloodied male, either by racing cars, or climbing mountains or something of the sort, um . or someone like Bertrand Russell riding roughshod over a paper and pencil environment, riding roughshod over that particular environment and that, you know that creates enormous problems because in the very act of trying to prove that you're a man by climbing mountains, you automatically join what's virtually a homosexual group, because it's just all other men climbing mountains with you; so there are endless problems about this, then there's the hippy type which is the kind of person that resolves a gender conflict by moving in a more feminine direction um . . you know sort of long hair and picking things like interior decorating or whatever, you know basically the effeminate male rather than the masculine male, and the fourth kind which Kinsey never mentioned which is what I call the invert and that's the person, that's the situation, that refers to the kind of person who is anatomically a male, but feels like a perfectly sanguine, you know sort of no-conflict female, you know you get that sort of situation where you have a husband and wife who are perfectly happy, but the wife wears

the trousers and the husband potters around doing the domestic chores, it's really a sort of role reversal but there's no sort of hassle about it, you know it's not even a point of comment, they're both happy about that, now it seems to me that those are minimum sorts of categories, they have their analogues in females as well, you have the perfectly ordinary no gender conflict female, and you have the somewhat, or highly masculine female, or the highly effeminate female, or the, you know like Marilyn Monroe or someone like that a sort of sugary sweet kind, who are actually anything but sugary sweet when you get to know them.

INTERVIEWER

Like Diana Dors

Bill

And you have the invert again, and it seems to me that the kinds of relationships that these people form will very much depend on the type of person they are and I don't actually see how someone from the outside without a lot of inside knowledge of the psychological logistics and dynamics of this situation can actually offer advice, you can certainly make suggestions about the sort of pairs that will go together and you can often sense that um . . a couple of people are basically not suited because they don't actually complement one another in the right sort of way, um . . but um . I mean if you ask me for a recipe, I think it would certainly be possible to do a very very much better job than computer dating or any outfits like that do, because that is just very trivial and superficial and I think a lot could be done to identify the kind of, the kinds of proclivities and interests and so on that people have, and the sort of conflicts they have inside them, I think a lot could be done to identify those and come up with more accurate recommendations about the kind of person that one should marry. But the trouble is that people often don't want to recognise that in themselves you see, if a male is somewhat effeminate, it's the last thing he's prepared to admit very often. I mean I always wanted to

be a girl, I would have made a beautiful girl (laughter)
 but um . . . really there aren't many people who are willing
 to actually confront these sort of problems in themselves
 um . . . but it is actually quite interesting because it's
 really the ones with gender conflict that have something to
 prove, um to actually prove that they're male or to prove that
 they're not male or whatever, or female or not female, and of
 course, it's the ones that have something to prove that um . . .
 are actually at the leading edge in my opinion, of social
 evolution, they're the people who are actually trying to
 achieve and do things in the world, so um . . . it comes as
 no surprise again if you actually look at the biographies of
 great achievers to find that there are all sorts of funny
 things about their sex lives and their inter-personal relat-
 ionships, and one would expect that because um . . . well one
 would expect it with respect to um a model of that kind, but
 it's actually very difficult to get into that, certainly I
 wouldn't be happy about giving matrimonial guidance because . . .
 that wasn't the question you asked, you actually asked about
 people getting married, I wouldn't be happy about giving
 matrimonial guidance because in the first place, one can't
 know about these sorts of difficulties and um . . . I don't
 think the people themselves know actually, I think what
 tends to happen is that people are aware that they're frust-
 rated and angry, or whatever, they know what sorts of emotions
 they have all right, but they don't actually know why they
 have got them, um . . . and it's not a question of people getting
 sort of married, the best advice that you could offer would be
 before that announcement was made in the form of some kind of
 guidance or self insight that would head them in the direction
 of finding someone that they were going to be compatible with
 even if um . . . that wasn't the sort of person that perhaps
 suited their vanity, I suppose there must be lots of men who
 would like a really beautiful looking doll on their arms (laugh-
 ter) that's probably the most disastrous sort of thing that
 could happen to some men and um . . . to actually make them see
 that might be well worthwhile. The same presumably there are

women who want a prince charming but um . . . I think the real difficulties about giving advice at that level, though one can certainly give advice about things like wedding arrangements and how to organise the cake and how to buy a house.

INTERVIEWER

You still go along with the whole idea of getting married?

Bill

Well . . . I don't know I've been married three times so I suppose I'm accident prone (laughter)

INTERVIEWER

I thought you would have been exactly the right person to . . .

Bill

Or optimistic, I mean I'm probably largely unmarriageable um ..because I tend to sort of dream my own dreams and think my own thoughts and I'm probably not the best company basically but um . . . I don't know about that, it's pretty punative getting divorced and I can say that with some conviction and they say the wages of sin are death, they're not quite that much but very nearly, my two previous wives both cleaned me out (laughter) and um . . . I mean in a way it was partly my acquiescing because I actually think it's worse to steal than to be stolen from, but the fact is that on both of the occasions my wives thought that um . . . they were entitled to virtually everything that I had and so I let them take it but um . . . so I suppose really on the one hand I'm aware that it's pretty bloody miserable if my. . . . (end of tape)

Yes what I was saying was that I think it's. . . my feeling is that It's pretty damn miserable when marriages go wrong because there's a sort of too much invested to quit syndrome, and I think people expend an enormous amount of effort trying to preserve marriages which are better terminated and here again, it's a very general model I'm putting forward because there's a sort of too much invested to quit thing that occurs in politics and national affairs as well, there's Maggie Thatcher with too much invested to quit in her own ideologies and economic policies and so on, but certainly in the case of marriages there is real misery when they go wrong and that has

actually lead some people to say that either people shouldn't get married at all, or it should be made a lot easier, or there should be some um um a lot easier to get divorce and a lot less painful for those parties in the sense that, you know everyone can just split things half way or whatever.

INTERVIEWER

But that more or less is the case these days isn't it?

Bill

Well, I don't think. . . that's what said, I don't think it's true, I think it very much depends on what the judge has to say because it's open to the judge to turn round to the wife and say "look you can go on working, you don't need to have any money from your husband" or it's open to him to say "yes a thousand a year, two thousand a year maintenance" it's all very difficult, so um . . . there's a totally arbitrary, this is the law on the matter but um . . . I think on the whole I like the institution of marriage, I just think that um . . . there's a real need to um . . . to have more insight into getting it right first time, if you do get it wrong to actually have some facility for winding the thing up in a less painful way, so um . . . you know I guess I do tend to like the idea of marriage, and I also like the idea of the extended family which has now vanished from the public, I mean the old families where you used to have the grandparents and several children and their spouses and their children, and so you were brought up in a world of close relatives and aunts and so on.

INTERVIEWER

That's dying out very much now

Bill

Yes it's almost vanished actually and um I think that's a pity, I think the extended family had quite a lot going for it but um . . . of course you do have the extended families still in the third world and that's one of the first things to go when you start industrialising and building cities.

'MY JOB'

INTERVIEWER

Can you tell me what you think your job at the Open University involves?

Bill

Yes well I think it's mostly politics, um . . I got when um . . I was actually on the dole when I applied for this job (laughter) back in 1969 um deliberately, I'd got pretty disenchanted with a whole lot of things, and I decided to just give up working and try to write things, I wanted to write, and I had been on the dole for about three or four months and I happened to see this advertisement for the Open University Post in New Society and so I applied for it and much to my amazement, I was rung up by the Vice Chancellor who was personally looking at all the um . . persinally vetting all the chair applications, invited along to an interview within two weeks and offered a job on the same day, I probably only got the job because I could start the same day (laughter) but um , ostensibly the purpose of the job was to be in charge of a group of people who would help the academics in the other faculties to produce better materials, so the idea was that we'd help in the usual educational technology way and there's no need to go into that, but um . . um . . several things happened, after about three or four years of that I got progressively disenchanted with Higher education, it seemed to me to be excessively indoctrinal, um . . I didn't see that the courses were really trying to cultivate any high degree of criticality in the students, it was mostly wrote, record, remember this, you know, learn how to apply and manipulate these formulae, the name of the game really seemed to me to be to sort of get ideas out of the, out of the teacher's head on to paper and into the student's head with no challenges so I actually got rather worried about the indoctrinal nature of higher education generally, I got disenchanted as well about the fragmented nature of it it seemed to me that there was no kind of coherence, it's um it seemd to me for example: that all the foundation courses consisted of more of scrap books than units, little um little stories about this that or the other you know this week it's about the law, next week it's about crime, next week it's about prejudice or whatever, um . . so I really formed the opinion that it was a pretty low

level education that was being given and I felt I couldn't say anything because whilst that was my opinion, it didn't seem to me to be worse than what was going on elsewhere and so um . . I got, I kind of got to feeling that the whole educational technology effort was really directed towards producing what I might describe as a better botch because here were the academics in the faculties mostly botching up the stuff that they were writing and here were these educational technologists helping to make the botch a little bit better than it might have been and um. . so I really got pretty disenchanted with the whole thing, my um . . so I also got very disenchanted with various committees which were manifestly um . . which were manifestly political because within about three or four years the whole O.U. staff did bureacratise and then people started competing for resources and um pointing the finger at other people and looking for um (you know all that stuff I was talking about in connection with Poland where you actually try to single out the weak people and form pressure groups, you look for scapegoats if things go wrong) so um . . I got pretty disenchanted with all of that, and I tried to carve out a job for myself which is really a set of jobs, first of all I focussed on just two committees which seemed to me to be predominantly task oriented rather than political and one was the Higher Degrees Committee which I was chairman of for three of the more formative years of its existence and um the other committee was the Staff Promotions Committee which wasn't political in the old days, although it has got increasingly political now. I also took on a few higher degree students and um . . I also acted as a kind of general factotum helping David out with all the sorts of political problems and inter-personal problems that came his way and there are a large number of those, I mean almost every week someone tumbles into Olwyn's office in tears and tells some horrendous story of how mean someone has been to him or to her so there are always bush fires breaking out all around and um eruptions of various kinds, and then there are various policy statements to be produced, negotiations with the Vice Chancellor and Deans of the other faculties, there are

promotions submissions to be kind of got together and so really there are a whole lot of things that have come my way, but what I have tried to do is to um . . help David in a very thankless task of trying to run this outfit, it's a situation where you actually can't coerce people even if you wanted to, there's no clout in the system, you can't fire people if they don't do what you say. Um . . I wouldn't want to coerce people actually but the trouble is that if you can't inspire them or persuade them either, then you are pretty impotent at the top and um , I've got interested in this whole phenomena, a friend of mine did a comparative study of executives, high ranking executives in America and in this country, he said that there was only one difference, all the American executives claim that they felt inadequate and all the British executives claim that they felt impotent (laughter) and what's interesting of course is that this feeling of impotence really pervades the whole of the Open University, there are enormous. . I mean I . . you wouldn't on the face of it, superficially you wouldn't find an organisation which had more participated democracy to use that expression, I mean everybody that wants to be on any committee can virtually be on it, and whenever there's any committee of importance like planning boards, student affairs and awards boards all the faculties are represented several times over, so in principle you've got a situation in which there is an enormous amount of participation but the fact of the matter is that it's all rubbish because the average employee at the Open University feels totally incapable of changing anything or influencing anything.

INTERVIEWER

Well for example I think every academic member of the O.U. is on the senate.

Bill

Yes that's right and what that means is that they might as well not be there at all because um . . in the first place what happens is that if everyone turned up there would be no room because there would be over a thousand people and they reckon, they hope in fact that not more than about 150 will turn up and what then happens is that various people turn up

as little lobbies or pressure groups basically and in actual fact senate is formally supposed to be the supreme body of the University which is responsible for academic decision making, now there's no way in which a body of 130 people can actually make sensible decisions, all they can do is to say yes or no, they can either accede to some propositions put to them, or also alternatively they can refer it back, so basically senate is a disabling system. It can either hold things up or just agree to propositions that are put before it um . . . anyway the thing is that I got interested in this and I was particularly interested when I went to Russia a few weeks ago because I was actually talking to organisations - the train managers, and I found exactly the same nonsense going on, don't know whether I told you.

INTERVIEWER

No you didn't actually.

Bill

Well there was um . . . sitting around the table in Moscow there was one manager of a large organisation saying "we have got a lot of workers - these worker committees here, in fact almost every decision that is made gets put before our committee of workers, there are lots of committees of workers in the organisation and the trouble is you know, that for some reason or other morale is bad, there seems to be a lot of absenteeism, the quality of the work is poor and nobody seems to be very interested in the organisation, quite frankly I think that if we could only crack down on the so and so's everything would start looking up" and opposite the table another man was saying "well I'm in an organisation where we don't have any worker's committees at all and everything is very authoritarian, we take all decisions at the top and hand them down - doesn't seem to be working you know, there seems to be a lot of absenteeism and morale seems to be bad, and the quality of the work seems to be poor and nobody seems to be really committed to the organisation, I really think that if we only allowed the workers more say in what was going on, things would look up". Now I mean these people are actually

sitting opposite saying these things and not hearing each other, each being absolutely convinced that if they were doing the opposite, they were doing what the other person was doing they could make it work. The thing is that you get these people moving continuously along this dimension of authoritarian permissiveness sort of no participation - lots of participation without seeing that that's just not delivering the goods, and a completely different sort of analysis is required, they don't actually see that the decision by a committee is just as binding to the poor devil on the shop floor as the decision by some authoritarian and um . . . so as I say I really got quite interested in this whole problem of organisationalness what goes wrong, the sorts of impasses that um . . . I started doing research on what I called initially 'organisational pathology' but I later changed the name, I realised that if organisations are set up in the way that they are set up, then what happens isn't pathological it's dead normal in the sense that what happens is bound to happen so it's unsurprising in the same way that the Polish thing is unsurprising, the hunger strikers are unsurprising, you know that's right, the thing is that you kind of sketch out the general scheme within which you can show the inevitability of these sorts of phenomena like poor morale, low productivity, which is actually happenign in Poland of course, just as it is happening here at the Open University, so um . . . really I suppose the answer to your question is a bit long winded which is that I have certain formal responsibilities, one of the things I try to take seriously is helping David Hawkrige to hold this thing together, having regsr'd to the fact that there is almost nothing we could do if we can't lean on people and can't persuade them, can't inspire them, can't convince them um . . . so that there's the problem of actually trying to hold the whole outfit together, there are a few important committees that I am on, which I am still on and I have these higher degree students and the rest of the time I agonise about the problems of higher education and the problems of management.

INTERVIEWER

That's most interesting, quite detailed. I was just going to revert back to the topics in the news and ask you how interested you feel you are in these news topics?

Bill

Well here again it seems. . I'm beginning to feel like a gramophone record, I was for example um . . there are lots of things I see in the newspapers which are just to me (maybe I'm a victim of a verification mentality) I just see everything that happens as confirming the sorts of views that I have about the way things happen, for example: I was reading Sir Keith Joseph's speech yesterday in the newspaper about the attempts by vice chancellors and others to get him to agree to spread the proposed cuts over three years instead of five, and his response seems to me to be so astonishing as to almost defy comment, he started off by actually saying that. . by actually describing all universities as um "Little oases of serenity" now only someone who's been, who's come from All Souls College could think that (laughter) I can actually give you examples of people who who um . . who actually, who were actually running industry to go to M.I.T. and actually leaving M.I.T. Massachusetts Institute of Technology, leaving M.I.T. to go back to industry for a more peaceful life (laughter) so in the first place it's absolute nonsense to describe universities as little oases of serenity, he then went on to say that um . . extraordinary punative manner he was saying that "these little oases of serenity have had it easy for too long, it's about time they suffered some of the hardships like everyone else" except Sir Keith Joseph of course, now that's an extraordinary thing to say because that shows no perception of how human beings should be treated, it's quite extraordinary to say you know "well we've been mean to all these other people and now we're going to be mean to you as well" I mean anyone who can think that way is really almost demented, he's got such an erroneous perception of what needs to be done for the . . to preserve or enhance the emotional quality of life, it's almost beyond the pale, he then went on to say "in any event it isn't more graduates that industry is wanting, it's better graduates"

INTERVIEWER

Ph.D material I think.

Bill

Now there are two assumptions there, first of all there is the assumption that a university education is all about feeding industry and commerce with employees, which I would totally repudiate, but I really think that Sir Keith Joseph believes that if I.B.M. wanted ten thousand more computer programmers by 1984, it would be a good thing for universities to produce ten thousand more graduates in computer programming. There isn't anything about culture there isn't anything about well, there just isn't anything about the cultural or societal needs, it's just to his way of thinking it's about universities feeding industries and commerce and doing a useful job, making people useful, functional units in society. The next assumption which is even more extraordinary is that the way in which to get better graduates is to wield the economic axe, now that is a total nonsense, there is not the shred of evidence for supposing that if you wanted to move in the direction of getting better graduates rather than more graduates, the thing to do is to wield the economic axe, if anything you will just get worse graduates because people will try to actually cut corners and skimp on their lessons and get the lecturers to do a bit more for the same money, but I mean the thing is that anyone who can come out with a statement like that is so far removed from what the reality requires that there's almost nothing that you can say about him, just that this goes on all the time, it's you know, one can hear Paisley making the same sort of utterances and um . . . and here again one just doesn't know what the man privately thinks because if he privately thinks that he is mad, it may be that this was just a public posturing, a kind of toe the Thatcher Line, one doesn't know, it might be all impenetrable at that level. The thing is, I read all this stuff and I'm just absolutely amazed at the way it all goes on.

INTERVIEWER

Perhaps he's frightened he might end up in Northern Ireland and Prior might be shunted off somewhere else. (laughter)

Bill

But um . . the thing about Sir Keith Joseph is (I mean Mark was making this remark) that he seems to have the kind of . . kind of mentality of . . I mean his economics is the economics of the lemonade stall almost, you buy a glass of lemonade for tuppence and you sell it for fourpence and that's a good thing, but um . . there's um . . it's um. . I mean the whole thing is so absurd, it's one reason why I think one should travel about the world a bit is that you can . . . it helps you to see the absurdity of some of the things that are taken for granted in ones own country, because when people at British Leyland want a raise they um . . the argument that gets made is that they are not a raise, nobody says that, they just get it, because they've never been profitable and the fact of the matter is, it is entirely a political decision whether or not you subsidise and whether the government chooses to pay for something as a totallity which makes no profit at all that actually absorbs resources, or whether it insists that something should be totally profitable, or whether it subsidises, if you go to Russia for example: I don't think Russia has got very much going for it, you know as a social system but you can actually get from any part of Russia um any part of Moscow to the other for about three pence and there are, that is a huge metro and they've also got buses and trolleys which come along every few minutes and they're going right through the night virtually and um . . it isn't any question about making them pay, the thing is that the way in which the economy is handled there are so many degrees of freedom in many respects that it is just nonsense to actually put this argument forward, people just don't seem to notice, it's ridiculous anyway to associate raises with productivity deals when the raises are being asked for to offset the standard of living. I mean every time a raise is given there's always a big fan-fare of trumpets - a productivity deal is struck and the workers are going to produce more for the same money now that's been going on now for ten years, just imagine if that were true how little they must have been producing ten

years ago and just imagine how much they will be producing in twenty years time, I mean it actually escalates like compound interest, you know if they were producing one car ten years ago they would be producing about a hundred cars according to that kind of argument, so it must all be spurious and posturing.

INTERVIEWER

So in actual fact you would say you were very well informed or pretty well interested rather, sorry

Bill

Well I actually watch the B.B.C news on television usually once a day and I look at, I usually look or scan through one newspaper a day but um . on the whole as I say I don't find myself remembering the detail very much, I just look through and say "yes that's the same old rubbish, except it seems to be getting worse".

INTERVIEWER

How informed do you think you are?

Bill

Well I don't think um . . I would regard myself as very poorly informed by say the brain of Britain standard, if you actually um . . where the emphasis is on recording specific facts um . . my whole contention is that there is no need to be informed if you have this general model of processes you can actually see what is going on, I mean I may be deluding myself but um . . I mean that would be a long argument, you know we could spend several hours, or several days going into the question of whether I'm deluding myself, when I think I know what's going on because there is a sense in which um . . it's easy to ridicule that because there are presumably parsons who see evidence of god's goodness wherever they look, you know and it's a kind of you know what ever you see . . and there are Marxists who see evidence of the correctness of Marxist theory wherever they look and this is a well known phenomenon known as the verification mentality which I might be suffering from, because although I don't happen to be a Marxist or a parson I've got a way of looking at things and I can see confirming instances of it everywhere, but um . . it provides a kind of ordering system you know one

doesn't really have to remember the details if one has that kind of general way of looking at things because you just say "oh yes this is another example of it".

INTERVIEWER

O.K. thanks very much Bill .

TRANSCRIPT 6Interview with DeanANDINTERVIEWER

O.K. then Dean, what do you think about the current state of affairs in Poland?

What do I think about the current state of affairs in Poland? Well first of all - interesting, interesting from the point of view that it illustrates the potential dynamism of the Eastern European Bloc, which otherwise has appeared to be fairly stable, um... with limited possibilities of social and political change. There's two elements I suppose. There's a slightly fearful element and a slightly academic disinterested element. The academic disinterested one is the possibility of social development, change within an authoritarian and oppressive totalitarian regime, just what kinds of pluralities of power are possible within terms of Solidarity and the Communist party um... is something for academics to dispute about, and to look at. The slightly more fearful element is of course, that it has foreign policy implications for the stability of the Soviet Empire as such, and here it is possible that the Soviet Union, under pressure internally, fearful of any kind of change, a geriatric leadership can't really accommodate might be inclined to go fishing abroad for alternative folkive attention for its own people, now that may have implications for our well being which are somehow less comfortable to consider. It may well be that the instability in Poland provokes the Soviet Union into a more aggressive stance in relation to the capitalist world, since we are whether we like it or not, a part of that universe um and the consequences might not be entirely pleasant, but that's the most pessimistic view, on the whole I think it appears to be good in that it does illustrate the possibility of movement, a relaxation, a liberalisation of these regimes,

from within. Any possibility of external intervention can only mean a kind of war like situation, internally it's a different story, if the Poles can do it by themselves, if they can manoeuvre and it's going to take great skill in manoeuvring to gain an alternative source of power to the Communist party, then there is a possibility of some kind of dual power. A situation quite new in the communist world, which the leadership will have to, one way or another accommodate or crush. It depends I think so much on the skill with which the Solidarity people move. They're very inexperienced politically and they have in some senses, the unfortunate I think unfortunate from my kind of secular, liberal, democratic view, a reliance upon the church as a source of autonomy and support. The progressiveness of the Catholic church seems to me to be somewhat dubious and limited, but none the less in so far as it does set up an alternative source of power and authority, then it's clearly to be welcomed, just how far it can go, well...

VIEWER

You don't know?

It's hard to say, historians by training are cautious about sooth-saying and.. no prediction is just at the end of the day, one plump against another plump, there is no rational basis for it. It's only afterwards that we can see where we are, at the moment it's - hope, fear...

VIEWER

In that order?

,Yes I think so, um.. yes I think so, it makes life easier.

VIEWER

Have you got any first hand information on what's going on in Poland?

No, my knowledge is very largely immediated by the Guardian.

VIEWER

I see (laughter)

N

And since I don't have a television and a radio, not much more.

INTERVIEWER

Is it through choice that you don't have a television?

N

By choice yes. I dislike television on the whole and with the exception of one or two odd films there is not much I want to see. I don't speak Polish of course so it's...

INTERVIEWER

Do you know any Polish people over here?

N

Um... one or two but it doesn't um..

INTERVIEWER

Nobody who has sort of come back from Poland just recently?

N

No, most of the people I know tend to be Polish Jews who got out during the war years or just before, during or just after, whose memories of Poland as a whole are not particularly fond ones and who are more than willing to let the Poles stew in their own juice. So there's no first hand information of value coming from that source - it's the Guardian which is um.. well where I get most of what I get and you know the B.B.C. news

INTERVIEWER ON TELEVISION

INTERVIEWER

Right a change of topic, I was actually going to ask you what you thought about television programmes and in particular about violence on television, now at some stage you must have watched television.

N

Um.. Yes. I can't say that I have very strong views about violence on television partly because I suppose because I don't have children as such and therefore don't immediately feel any immediate come back from seeing the children apeing I suppose the values and, manners and styles of television. Um.. I haven't noticed in the street people as such making some kind of simple replication of life as portrayed on television. I don't feel it's a very real problem. Again the rational kind of academic view is that we need more information about the impact of television and one begins to conjure visions of

S.S.R.C. awards and projects and people kept being kept in gainful employment in consequence. It's very hard, I would have thought to pinpoint any kind of causative in relationship between popular behaviour and television, though I imagine the language, everyday language has absorbed a good deal of script writer's imagery, styles, behaviour, I would imagine that is the kind of thing that goes on in discos or wherever young people congregate these days um..

INTERVIEWER

For example, I was thinking in terms of television programmes like the Professionals or Kojak which you probably have seen.

DEAN

I have indeed.

INTERVIEWER

Which are quite violent.

I

Yes they are quite violent, the Professionals in particular which seems to me a very violent programme, which half of its dramatic content relies upon people being hurled through glass windows and cars being smashed up and butts of guns being put into people's faces, again I'm not sure that..... I think that most people can make the distinction very clearly between the television fantasy world, which they might enjoy, and obviously do enjoy judging by the ratings and the every day world they inhabit. I don't think there is a simple carry over, there is obviously - there may well be some, let me be more academic about this, there may well be some carry over, but um.. to observe it in every day life seems to me to be rather difficult, but then the professional academics don't inhabit every day life and it may well be that we're not very observant.

INTERVIEWER

Would you say that sports like boxing and judo, which are given wide coverage on a Saturday are tantamount to fringe violence?

N

I'm sure they do and I hate to admit that I am rather fond of boxing, um.. but yes I think that is the glamour of these kinds of sports without a doubt it resides in the violent element yes. I think that violence is attractive in as much as war films, war literature, the whole war experience is one of perennial fascination for people of all age groups I think. Yes there clearly is an attraction about violence.

INTERVIEWER

Would you say that violence in television programmes and sort of violent sports like boxing and judo are... aids sort of violence in domestic situations?

DEAN

Um.. very very hard to say, very very difficult we know that personal relations, violence in personal relations over time don't require television to make them violent. We know that in the middle ages - by our own standards personal relationships in, in sexual terms were rather coarse and indeed rather violent. One knows that perhaps two thirds of the globe today outside of the industrialised world have very different kinds of standards of personal relationship which are independent of any kind of media intervention. So is there a simple connection - I am sceptical. That there may well be a particular kind of connection for western European cultures, yes I suppose there almost certainly is. Though to specify it I would think I would be rather hard put at the moment. um.. very hard again being a single chap and not being prone to bash women around as such, and even if I were I'm not going to say (laughter) very hard to say I can't say that I've ever actually seen a row which might be a kind of classic case of between husband and wife, or children and parents, in which they have resorted to T.V. language and imagery to explain what they are doing. The range of violence and the expression of violence seems to me to be very much part of an autonomous source bound up with the culture of every day I think. which almost certainly pre-dates television. So perhaps is sharpened in some respects by it. We need more research is the standard form. (laughter)

LOONING/SOLAR ENERGYINTERVIEWER

Right in August in actual fact a fellow crossed the channel using a balloon and solar energy - I don't know if you remember reading about this?

Vaguely yes.

INTERVIEWER

Do you see ballooning as a form of transport in the future?

Well ballooning/airships, yes I imagine that it must have some kind of attraction, indeed I also read something about some firm have recently developed an airship yet again. Apparently this can be economical clearly given the soaring cost of aviation fuel and its increasing scarcity and no doubt, experiments with airships will be bound to continue.

INTERVIEWER

This is a zeppelin type?

This type of thing yes. Whether it's viable is beyond me, and I must admit that in all honesty it's not the kind of ~~problem~~ problem that really engages me very much. The ecological side of the world the disaster side of it, seems to me to be a matter of you know, no real importance. Perhaps that says more about the ecologists than about ourselves and about the availability of resources. So I must admit that I don't take too much notice, I must admit that I tend to be more price conscious about the cost of air tickets than about um.. but even then I don't see myself being ferried across the channel in an air balloon.

INTERVIEWER

I was just wondering because obviously solar energy is coming into itself in the form of solar heating and we have got quite a few projects up here in Milton Keynes haven't we, revolving around solar energy.

So I understand.

INTERVIEWER

Which I have looked at and I just wondered if you sort of did advocate any alternative forms of technology?

Well I wouldn't say I advocate that is far too strong, I would think obviously, one is interested in price stability and if alternative forms of energy would provide it, it would make you feel good at the same time, but you are not depleting this valuable resource which is irreplaceable, then of course, it sounds comendable both in terms of cost and morality, an ideal combination, but I wouldn't say I advocate it.

VIEWER

Perhaps advocate is a bit strong.

I mean like most people, I would be more likely to press for a wage increase to pay the cost of the scarce resource rather than conserve and that is it I'm afraid..

THIRD WORLD

VIEWER

How do you see the development of the third world politically and economically?

You see again, to ask historians to forecast - historians recoil instinctively, it's dangerous, the world is one of those funny places which tends not to conform to ones predictions, if you mean how do I see it in the predictilve sense, I couldn't really tell you. How would I like to see it is quite different. To tell you how one would like to see it, obviously one would like to see peace, prosperity diffused on a grand scale, and of course, learning because learning is a function of, to a certain degree, prosperity and since I'm in the professional business of disseminating learning it's jobs for the boys. um but that is the crudest way of looking at it, but from a moral ppint of view obviously perhaps two thirds of the world living on the verge of subsistence is really not acceptable to any , I was going to say vivilised but that is not quite the right word, to people with an average sense of morality I would have thought. I wonder if that's that over strongly developed to find poverty offensive.

ER STRIKERS

VIEWER

I think it was only last week or maybe the week before that that the hunger strike came to an end in the Maize prison in Belfast. Up until that time the hunger strikers were prepared to go on literally until their deaths, um.. do you see these people as political prisioners or prisioners of conscience and do you think they should have got political status?

I think these people are clearly political animals so to speak, I think they ought to be treated, that their political status ought to be conceded. I think that the particular tactic of the hunger strike has been used in a calculated sense, it's designed to put the British government in the worst possible light in the world and particularly in the United States where the Irish vote is significant. But it is one that has no special merit, it seems to me that it is a rational tactic that alternates with the bomb, with the ballot box, it is on the same kind of continual, the consequences are clearly far more offensive and people dying or whatever the number may be would have been, clearly has a dramatic registration of a protest that no other form seems to have, and I think that the people who are organising the campaign are aware of this and that it simply is a political tactic and the response ought to be in political terms, that it's naive to imagine that by simply calling these people criminals, terrorists or any other kind of name will be sufficient to make them go away, it will certainly mobilise your own population against them which I am sure is what the British authorities want to do. It doesn't do outside of Britain, it doesn't have the same effect and it certainly has no effect at all amongst the Catholic population both in the north and I think of the south, very limited. There is clearly an appeal which the I.R.A. taps - a nationalist appeal which is clearly political, which may well be impractical, probably is, but which isn't very representative in terms of nuts and bolts, but in terms of its reality and in terms of people's susceptibility to that appeal it's very very real.

VIEWER

Yes so at the onset of all of this, do you think that the actual hunger strike was worthwhile?

For the families of the deceased I

VIEWER

I think it was about ten actually.

Yes I think it is ten, for the families of the deceased I have

reservations I think, the willingness of the families to intervene increasingly after about the fifth indicates that the families themselves were no longer willing to see their relatives being, what they thought of as used for a much larger campaign. They saw human beings dying, their own flesh and blood rather than political points being scored. Had it been a bomb over the water on the mainland then it may well have been far more prone to get the applause of the population. When it is your own nephew or son then clearly the abstract concept is somewhat diminished. So from that point of view, clearly it was running out of mileage and it was running out because the families themselves were willing to intervene increasingly to prevent the strike having its effect and the British government was clearly enjoying it and beginning to capitalise on it, rather dearly but none the less clearly, it was becoming counter-productive and so I think would have had to have been called off in any case, whether it was effective or not - it depends on, I mean it depends on terms of mobilising American opinion, world opinion it was very effective, in terms of advancing the cause of Irish unity I would have thought it had no effect whatsoever and that the protestants are more than ever alienated from the possibility of a united Ireland and will fight to prevent it and will almost certainly prevent it, they are a formidable force I think which can't be underestimated.

BIES

VIEWER

O.K. Thanks Dean, something completely different, have you got any hobbies or activities which you engage in outside of the Open University which sort of really turn you on, get you going.

Yes, yes my principal hobby outside of the ^POpen University um.. can be summed up as, I suppose chasing women (laughter)

VIEWER

Isn't that your hobby inside the O.U.?

Well yes but the fervour with which I bring to the cause increases outside. Partly because the consequences are less damaging if anything goes wrong. Hobbies in the sense of do-it-yourself in the sense of you know, house proud, car mechanics,

collecting stamps then no, I find them all dreadful things.
I'm a great one for wandering around the country, socialising,
eating um.. that kind of thing, or cinema I like a lot of.

INTERVIEWER

Yet You don't like television?

Oh no I like nice escapism with a meal to go afterwards, I like
an event, television is not an event it's just routine. Cinema
is an event. Yes but I have no formal hobbies in the accepted
sense I think.

INTERVIEWER

And you don't play an instrument or engage in gardening?

DEAN

I certainly don't engage in gardening, I used to play an
instrument but I don't find the time anymore, but then since
it was drums, it was a rather anti-social instrument in any
case (laughter) um.. yes.. no formal hobbies in the accepted
sense of the word.

INTERVIEWER

So in actual fact, your Open University work spills over into
your private life?

Yes I suppose so, partly because one of the great joys of
working as an academic particularly at the Open University
I suppose is the absence of industrial discipline, You have
relative freedom in terms of time, the satisfaction of the
work itself to the point that work isn't a nine to five
occupation because of the satisfaction and the inherent
creativity, at least I think of it as creativity anyway,
within the work, it makes no difference where you do it, you know
it's something which goes on and fades out when one becomes
tired or has things to do
Yes.

INTERVIEWER

That's why they're fit is it?

I think so.

INTERVIEWER

O.K. have you got any advice you would give to somebody
getting married?

CE TO SOMEONE

ING MARRIED

N

Yes, I think statistically, delay it until you're, the nearer you are towards forty the more chance you have of your marriage surviving apparently.

INTERVIEWER

Really?

N

So I understand, so in that sense given the increasing rate of marriage failure and given the cost of marriage failure, the monetary cost as well as the emotional one, particularly the monetary one because the courts in this country are very prone to be very sympathetic towards the females these days giving them fifty per cent of everything, a dreadfully regressive development, um..prudence is called for. No seriously no advice whatsoever go ahead, it's a lottery like everything else.

INTERVIEWER

You would see it like that would you ?

I

~~Yes~~ I think so.

INTERVIEWER

You would still advocate marriage as opposed to sort of living with someone?

I don't feel strongly about it either way, I think that the advantages of marriage are really social advantages and cultural ones and perhaps economic ones rather than personal ones as such.. I think it is perfectly adequate to live outside the bounds of wedlock so long as you and your partner are contented. The actual formal ceremony seems to me to be of no consequence unless of course one member of the partnership feels the need for that ceremony. It costs nothing, there is no principle involved to go along with it um.. the advantages I suppose are really for children um.. in as much as they can be subjected to different kinds of abuse for no good reason and there is no reason to subject them perhaps to that, but beyond that there seems to be no particular advantage I would have thought, except

for invitaitons the wording of them sometimes is tricky, but that's going against convention and I mean to hell with it. I have no advice to offer anyone on marriage I would have thought that you know, you pays yer money and you takes yer choice (laughter)

I DO YOU THINK YOUR
ENTAILS
RVIEWER

Right can you tell me what you think your job involves at the Open University?

(sigh) what it involves, it involves I suppose above all communication, communication to an audience who one sees very rarely, has very little physical contact with um.. and therefore, one is reduced to expressing ideas and one's own personality to some extent, through the medium very largely of print, backed up by radio and television, but without the possibility of comeback, therefore, it requires you to anticipate in a more unusual degree I think, the responses of one's audience, now the substance of the communication obviously differs by discipline in terms of its particularities and I suppose in broad terms it involves, because we are involved in giving a general degree and it is part of the phillosophy of the Open University and the ideals you know of a broader liberal education for particularly people who missed out for various circumstances.

RVIEWER

Second time around if you like?

Yes one would subscribe to all those values obviously, um. the particularities though, are difficult, they pose considerable difficulties because one is used to a seminar situation of endless explanations till the student grasps the basic point, that isn't available any more and that does require you to trim both the substantive content I think of the discipline and to focus upon and select sometimes arbitrarily in some respects, those elements which give the minimal basis to say that a student has grasped that discipline.

RVIEWER

You've got to be quite clear thinking then in actual fact?

It requires clarity of thought and clarity of expression and I think it's the latter that determines the former in many respects.

INTERVIEWER

Obviously lecturing in an ordinary university college doesn't require those elements necessarily at all

No it doesn't

INTERVIEWER

Because you have a second chance at explaining something or more than a second chance?

DEAN

That's right you are also simply available, a student who is concerned can simply collar you at the end of the lecture and say "oi chief what's that all about I don't understand that" and you will explain, whether you want to or not you will explain. That kind of.. all the personal contacts all the things that are taken for granted have to be mediated by print or television and radio. Television less and less though, and radio increasingly.

INTERESTED ARE YOU
TOPICS IN THE NEWS?

INTERVIEWER

Reverting back to topics in the news, how interested are you in these topics?

DEAN

Um..

INTERVIEWER

I mean would you say you are very interested.

Yes. but I mean, in terms of the very medium, I don't really have anything very precise, I would have thought above average, where ever the average would be located mine would be slightly above.

INTERVIEWER

And would you think you are very well informed although if you just read the Guardian.....

Very well informed again above average informed rather than very well informed they might not be the same thing.

INTERVIEWER

O.K. then right thanks then Dean .

Interview with Derricksh SituationINTERVIEWER

Right then Der'k I'm going to discuss some topics with you and I'm interested really in how you think.

What do you think about the current situation in Poland at the present moment?

DERRICK

Umm I've a lot of sympathy for Walensa and his workers, but I think it's very dangerous to encourage them to go too far, because the Soviet Union is a danger to Poland, for obvious strategic reasons, they cannot allow Poland to go over to what they see as the enemy in the West. So that I think it's a chance of gaining and making some gains for the Polish working class but only if he is very very careful.

INTERVIEWER

Is it possible to talk up a little bit because we're getting a bit low.

DERRICK

Yes I'll try and talk up a bit. I don't think that it's likely to spread from Poland because the essential element in it that's missing from the rest of Eastern Europe is the Catholic church which acts as a separate non state organisation. There is no equivalent organisation as far as I know in the rest of Eastern Europe. Um.. the other thing is that I find rather funny about it is that people who support Walensa in this country, many of them are actually opposed to free trade union in their own country as they are in the United States, yet there are prepared to support it providing it happens in someone else's country, I just find that rather amusing.

INTERVIEWER

What were you going to say about the role of the Catholic church?

DERRICK

Well it provides for Poland a national organisation which is tolerated by the State and communist party, yet is not part of the communist party system. Now there is no equivalent organisation as far as I know in any of the other Eastern European countries, the others are very much single party states in the way that Poland isn't as long as it has a separate Catholic church. It's not an unknown phenomenon in other places where other avenues of political expression are blocked

off that the church plays an oppositional political role, it has for American blacks for a number of years, there have been very close links between the Civil rights movement and the protestant churches in the Southern United States, black protestant churches and for very much the same reason that they found it extremely difficult to organise overtly political institutions in opposition to the government so that they had to resort using the church as a vehicle of political protest.

INTERVIEWER

Anything else

DERRICK

I don't think so, I'm not a specialist in Poland, I don't know a great deal about it. I have a lot of sympathy for the people who live there.

INTERVIEWER

Well obviously organisation and systems are important can you say a bit more about those?

DERRICK

Well I think the key organisation system is the Catholic church, the fact that there exists a large and very powerful and relatively wealthy organisation in Poland which is not part of the communist party state system it's not duplicated to the same extent in any other East European country um.. politically it is unique to Poland because historically like Ireland there is a link between Polish Nationalism and Catholicism um.. because the two traditional enemies of Poland were Protestant Germany and Protestant Prussia and orthodox Russia so that the Catholic church played an important linking role in the whole concept of Polish Nationalism part of the thing of being a Pole rather than a Prussian or a Russian was to be Catholic rather than Protestant or orthodox. um.. and it is because they have this deeply historical link with the Catholic church and because the Catholic church, partly for that reason is tolerated by the party hierarchy that they have been able to use it as the core, around which Solidarity has been able to organise. I don't think that one can talk about organisational structures in the case of Solidarity at this stage because they are very very young, very fluid, and it's very difficult to see where they are organised, certainly from

where we are.

INTERVIEWER

What do you mean by organisational structure?

DERRICK

Well they don't have a union bureaucracy in the way that the state and the church have a bureaucracy and a hierarchy, um.. at the moment Solidarity seems to be largely polarised around the charisma of Walesa

INTERVIEWER

Of what?

DERRICK

Walesa, Walinska, the leader of the union.

INTERVIEWER

Oh yes.

DERRICK

And it's very difficult to talk at this stage in their career about how they are going to produce an organisational structure as opposed to simply a movement based on the charisma of one man. Though I've no doubt at all that they can given a little time and a little effort do so. But I think that the essential thing is the close link with the Catholic church, which gives them a base independent of the party, the only danger is that the party could use that as an excuse not only to crush the union but the church as well.

INTERVIEWER

Do you think that is possible?

DERRICK

Yes I think it's possible to do it in the short term to repress both the church and the union, whether it would work out in the long term, part of the problem of Poland from any government's point of view is that it has a history of violence and a history of violent revolution an insurgency that goes back to the eighteenth century or before and consequently it's a very difficult country to repress, people tend not to accept the government in the way in that in the more settled countries of Western Europe we are used to the idea of people accepting the government and only using constitutional channels. In Poland there is a history of revolt which is very deeply ingrained.

INTERVIEWER

When did the revolution start in Poland, you said a history of revolt.

RICK

It's very hard to date it, the Poles throughout their history which goes back a thousand years as a country have had revolutions of various sorts the country itself has been suppressed and divided by the surrounding powers - Prussia, Russia, the Hapsbourg Monarchy several times in its history and it's always retained an identity which is largely built around the Catholic church and it has always had a tradition of uprisings against whoever it was ruling the country at the time. So it's a very deeply ingrained - the attitude of the Poles, the idea that there is something legitimate against⁶ anti state violence.

INTERVIEWER

So would you give the Polish people any advice at this time?

RICK

No - because I don't think that anybody on the other side of Europe with a totally different social system and climate is in a position to give them advice, I think they have to work out things for themselves and that however well meant advice from this side of the world is, it makes absolutely no sense for people to give it because we just don't have the knowledge of Poland and its politics which are as much a matter of the feeling of the Polish people as they are of structures or voting numbers. um.. to give advice, I think you give advice it is pointless unless you are very very familiar with the country, the only people who can advise them are their own people.

INTERVIEWER

How does their structure differ from ours?

RICK

When you say how is their structure different from ours, in what way, what structure.

INTERVIEWER

Well you've just said with respect to giving advice

RICK

It differs, they live in a very different social structure, they live under a communist government, they live in a society which although it has industrialised enormously in the past half century is still predominantly a society of peasant farmers they live in a country that has a particular history and has

particular... different ways of thinking about the world, which arise from their history and their social structure as it was and as it is and I think advice from people who are outside, who don't understand the feeling of the Poles, or the attitudes of the Poles is going to be mistaken advice. I don't think that I or anybody else in this country is in a position to give the Poles advice on how to run their affairs.

Violence on Television

INTERVIEWER

Right Turning to something different - have you got any views about the supposed violence on television

RICK

Yes I do have some views. I think that some television violence is unnecessary gratuitous and actually glorifies violence. I'm thinking of particular programmes.

INTERVIEWER

Such as - can you, .. not Starsky and Hutch and Kojak type.

RICK

Um.. yes but they are less violent than things like the professionals um and within the professionals there is a totally immoral attitude towards both life and violence which is extremely dangerous if you expose people to it. In effect they make violence in itself rather than the means to an end - the end itself and they are gratuitous with it they are ever ready to use violence with a total disregard of what happens to other people even their attitude towards people who are supposedly their friends is one of quite casualness really. When a friend or colleague is killed they dismiss it as something trivial and this whole attitude towards violence, death to my mind is far far too casual. They glorify the act of violence and that I think is extremely unhealthy it's the worse form of pornography.

INTERVIEWER

Do you think there's violence in other programmes apart from those that you've mentioned? I mean for example quite a bit of violence has been shown along with the television news

RICK

Um.. yes some of it has very much the same effect, part of the problem is programmes like the professionals that set the way in which violence is portrayed and perceived that is what is

dangerous, most of the violence shown on the news is the inevitable result of reporting the fact. That violence occurs and also, and I think this is quite important, from a point of view of making television, violence is good television, good in the sense that it produces a visual effect which creates movement, interest on the screen as opposed to talking heads in most important news involves talking heads, politicians, industrialists, union leaders which are intrinsically rather boring. um.. if you look at the face of the average politician or industrial leader, it's not even an inspiring face, it's a rather plain ordinary sort of person and is rapidly easy to lose interest in unless you're particularly interested in what they have to say. Violence on the other hand, creates a situation in which something is happening on the screen, and the history of moving pictures is after all the history of showing violence and even people like Laurel and Hardy gained much of their comedy from the concept of violence, perhaps applied against object as rather than against people, misapplied

VIEWER

Um.. it was against themselves wasn't it, quite a lot of the time.

CK

Yes it's against themselves, the thing is that it's people doing things rather than sitting talking. If you want a visual image, you don't want a visual image of two people or three people or ten people sitting there in a crowd, talking. It's much more interesting if the crowd is busting up something, or doing something, I think inevitably television focuses on the violence in society, because violence produces um... good visual images. At another level, people are fascinated by violence because they are afraid of it, therefore, if you, people will watch it because they are fascinated, it's exactly the same philosophy that's selling the image that lays behind Hammer horror films. If you could get people frightened, they'll watch because they're scared, because being frightened is a heightened emotion. People like to have their emotions heightened which is why they do things like - drink alcohol and one way of heightening your emotions is to get yourself scared, I mean you're not actually really scared because you know, ultimately Frankenstein isn't going to come into your sitting room, but you like to watch him on the T.V. screen or go to the cinema and watch a horror film, it's precisely this

sort of horror disaster movie syndrome which encourages television current affairs and news producers to focus on violence, the knowledge that people are fascinated because they are repelled by it. They watch it, even though they don't like it, they will watch it because it frightens them.

INTERVIEWER

Would you say sport like boxing and judo, fencing, things like this some of which are given quite a large slot on television on Saturday afternoons are what one could call fringe violence?

RICK

They have an element of violence but it's highly ritualised and it's not intended to hurt. Boxing I frankly disapprove of anyway because I regard it as a dangerous and rather stupid sport, most other sports of that nature, wrestling of course, is shown on most television programmes and is a branch of show business and not sport and it's mostly acting, rather than actual violence and I think that the vast majority of audiences for it watch it for this. Um.. the other sports are sports of skill rather than violence although some violence may appear to be involved in them, things like judo um fencing

INTERVIEWER

Karate ?

RICK

Karate - I don't know enough about to form an opinion, judo and fencing are basically forms of sport which are combative, but they're not really violent, I mean it's extremely rare for anybody to be seriously hurt in a judo contest because they're organised in such a way that for instance in judo the opponents are matched so thatn um.. they are unlikely to hurt each other, they are equally matched and both are as equally skilled at absorbing throws and avoiding injury to themselves when they are thrown as they are when they are throwing their opponents. The danger is very small and most people recognise this. That is it is purely and simply a sport. um.. with fencing of course, elaborate precautions are taken to protect the participants from injury, they wear protective clothing and the swords are tipped with a small ball which prevents them from penetrating so there is very little danger from fencing um.. the other thing of course. that S^Aturday afternoon programmes by their very nature are not terribly important. I think the T.V. Companies are well aware that the S^Aturday afternoon audiences are one of the lowest they

have in the week and so consequently what they are projecting is really not much of umm... a minority interest, they centre round sporting events I think the amount of violence shown on Saturday afternoons - violence in itself is not particularly large and it's presented in such a way that it doesn't glorify violence, it's basically about sports which is a very different thing, there is a world of difference between two people fighting in the judo ring in a ritualised style of combat with rules and a referee and the kind of pointless gratuitous violence which occurs in things like the professionals when people punch each other or even shoot each other, almost on a whim and seem to derive great satisfaction from it. You never see this, even in professional wrestling people don't or if they appear to, it's so obviously hammed up acting that everybody there knows that it is not intended and that basically the participants don't have any dislike of each other and wouldn't deliberately injure each other.

INTERVIEWER

Would you say though, that violence - the violence that you have just described and violence which appears in some sports can contribute to family violence?

ERRICK

I think, I don't think violence in sport is a major problem, I think certainly some of the so called entertainment programmes which feature violence as a central theme, can contribute to violence they contribute to an atmosphere in which particular groups, particularly young men or teenage boys are encouraged to think of violence as a problem solver - to see that the solution to problems lies in hitting somebody or shooting somebody and that is extremely dangerous because if people get that kind of attitude then they will be far too ready to resort to violence when they cannot win by any other means even when violence itself is no use to them, in fact, is self-destructive, they will resort to it because they have been encouraged to have an image of them being a man, that it implies being prepared to be violent and to use violence as a matter of routine as a method of solving problems or settling disputes and that is an extremely dangerous attitude to foster.

INTERVIEWER

Do you think this happened in the recent riots that happened in the recent riots in Brixton or Toxteth, Liverpool or do you think that was a different problem?

ERRICK

I think it's largely a different problem, it's a much more deep rooted problem, um.. it has a degree of influence on it, but the influence is as much indirect as direct and it's a case of people who feel they have been persistently discriminated against, in the case of Brixton they were very much at odds with the police and one of the problems is that the police increasingly over the past few years, recruited young men particularly in London who have been brought up to believe that violence is a problem solver, who have been brought up to believe that joining the police they were getting into a tough exciting job, the world of the professionals and this means they are far too pre-disposed to use violence as a method of doing their job, which is a very bad method of policing, it's a self defeating method, inevitably it provokes a situation it has in Brixton certainly. I don't know enough about Liverpool though god knows what little I do know suggests that they have got more problems than would just result from television violence. Um.. this has provoked a situation in which the people who think they are getting the dirty end of the stick - think that violence is the only resort they have or violence, um.. it's odd because it's a phrase that very often occurs to the police rather than to the rioters, but many of the rioters probably feel that violence is the only language the police understand, that unless you hit a copper, he is not going to listen to you, he has to first be banged with a brick or have a molotov cocktail thrown at him before he wakes up and listens to what you have to say. Um.. this is partly the police's own fault, it's partly the way they have recruited and the way they have trained their men to be ready to use this physical methods of policing and the price they pay is that people retaliate physically um.. it has happened in other parts of the world, sometimes with very disastrous results for the police. One thinks of the Shah's police - they're extreme, they were the first target in the revolution for violence by the mobs which systematically aimed at policemen and nobody else.

Because they had built up a reputation as violent men and so they had attracted opposition from other violent elements, other cases which had happened in other parts of the United States, where the police have been trigger happy and where policemen have been killed by civilians and coroner's courts have come in with verdicts of self-defence, because they have assumed that the policemen were too ready to use his fire arm and therefore the civilian was justified in shooting him first. Um.. we haven't reached that stage yet, I hope we don't and I hope and think what we need to do is to look at the whole concept of policing by force because it's an unproductive method of policing it's not even efficient in terms of crime detection because it creates a barrier of hostility between the policeman and the community and ultimately a policeman, to do his job is dependant on information from the public and if he creates a barrier of hostility the public tell him nothing. Um.. London has I think unfortunatly in part got this far, people do not talk to policemen and policeman are seen as the enemy, they are hostile, consequently they are, despite their very aggressive tactics losing control.

cons - Solar Heating.

INTERVIEWER

Right - A few weeks back now, a fellow crossed the channel using a balloon and solar energy, I don't know if you read about it?

RICK

I read about it, I think. I also read about a chap who crossed in what was basically a glider using solar energy.

INTERVIEWER

Yes, well this was a balloon, it was using solar energy anyway he crossed the channel fairly sharpish, do you foresee ballooning as a form of transport in the future?

RICK

Ballooning No. Because the nature of balloons is such that you are too much at the mercy of the elements, a balloon by definition is extremely difficult to steer, it can only be approximated to steering down wind, you can never develop a balloon which can be steered, unless it has some power source, some fairly powerful engine because if you take - this is an

analogy - the sailing boat you rely in fact, on the water, which gives you leverage against the wind to control your direction, you don't have any leverage in a balloon, you're free floating in the air and you must go where the air currents carry you they're not suitable as a mode of transport because they're too prone to being blown about by the wind, you simply cannot control their direction of movement and they also present considerable problems in getting enough lift, to lift a worthwhile commercial cargo so I don't see the balloon as a method of transport, it's possible that the airship - the steerable balloon with powerful engines will make some sort of comeback but I wouldn't like to bet on how near that is. There are all sorts of technical problems involved with it, and I'm not an aeronautical engineer I only know a little bit about it and what I do know suggests that the long term problems of designing an airship which will be commercially feasible are not insurmountable, but it would involve quite a long period before this was developed and the key to this is energy cost. If jet fuel becomes so expensive that flying commercial aircraft ceases to be economically viable then obviously an airship which is relatively cheaper to run um.. for the same load, will have commercial possibilities but at the moment I don't think they do have.

INTERVIEWER

But solar energy is coming into its own, is it not? I mean for example we went and had a look at those houses in solar court, the houses in solar court which were using solar energy heating systems obviously solar energy is coming into its own, wouldn't you say?

RICK

Well solar energy has possibilities for some things, particularly passive solar energy, designing buildings, it's mainly for building running space heating possibly in some very hot parts of the world where electricity is used to air condition buildings. One thinks of the south west of the United States and places like that. There are obvious advantages for using solar energy which is abundant and cheap to drive the air conditioning systems I don't think solar energy as a main heating source is going to be viable in this country because our weather pattern doesn't allow it. I think we might be able to make marginal use of it

to do things like warm up water, obviously if you take the initial coldness off water if you warm it up slightly then it is going to be cheaper to use electricity or gas to bring it's temperature up to boiling point or somewhere approximating to boiling. Um.. and I think solar energy has uses here, it can also be used of course, to heat rooms in the sense that you can, by using double glazing for instance, you can trap, you can get a glasshouse effect, you can trap some of the sun's heat inside a building and use it but it has limited uses in this country because our weather pattern is such, that the time we need sun and heat most is the time when our sky is likely to be largely overcast and so not producing or sending out solar energy in usable amounts. I think it has a possibility as a form of additional heating, supplementary heating in this country, but I don't see it as an enormously powerful source of energy, if we are going to have....

INTERVIEWER

It's going to be a form of supplementary heating say, and not going to take the place of gas or electricity or... as a form of heating.

RICK

I think if we are looking for a source of energy that is cheap and renewable in Britain the obvious one is tidal power. Because being an island we've got the very long coast line if you count indentations we have an enormous amount of tidal power surging around us every day and this could be harnessed to drive some form of generator but again it's difficult to work out exactly how this would be done. It's a matter for engineers, certainly in terms of the economics, solar energy the sun is too unreliable an object, in the case of the chaps who flew the channel in an aeroplane driven by solar energy, they had to wait about three weeks for a suitable day with sufficient sunlight to power their motors. Now you cannot run heating systems, you cannot run industrial processes on an energy source which is so inherently unreliable you essentially need some sort of power which is basically turned on and off as

required. So that tidal energy converted into electricity can do this um... hydro electric energy of various kinds can do it. I don't think that solar energy is answer, certainly not for this country and of course, it's a difficult problem for even other countries where the sun is more powerful and more consistent in its appearances, because the amount of energy gathering panels needed to gather commercially usable amount of solar energy, and I'm not talking about domestic heating, I'm talking about something like a power station, are enormous. It would be extremely costly to make, so it's very hard to see where this could be done on a commercially viable basis. Because after all if you were going to create an enormously powerful generator then you must, inevitably have some sort of market for the electricity produced and most of the places where there is a large amount of solar energy available do not have a large number of people anxious to use it. If you haven't got the people anxious to use it, it makes no commercial sense to build it.

VIEWER

Right thenDer'k, have you got any ideas about the development of the third world politically and economically?

3K

Um.. that's an awkward question because I'm not sure first of all how you define the third world, the third world covers an enormous area and there are several countries for instance, which are on the margins of the third world one thinks of places like, Southern Italy, perhaps Israel, um.. parts of South America, who are almost on the margins of the industrialised world, but are not necessarily as industrialised as the United States or Great Britain. Certainly the major problem of the third world is to produce sufficient food, linked to this, and this is quite important is the need for them to earn money abroad. In far too many countries the problem is that these two things are in direct opposition that the choice is between using their best arable land for cash crops like tobacco, coffee, tea or, using it to produce local food supplies. All the thrust of the last hundred years has been to turn this land into cash

crop land, partly because very largely, the colonialising powers have not, just talking about direct colonies now, because even countries which were normally independent like Thailand or Abyssinia were very much under the power of colonial states, Western Europe, The United States, these countries have had their economy bent towards servicing the economies of the western world. They are not able to easily switch back, because they have built up a pattern of economic dependence on the western funds and the need for foreign earnings, means that the pressure is in fact to produce more cash crops and unless they are prepared to go to considerable lengths and go through considerable difficulties during the changeover there is very little hope that they can feed themselves, and unless they can feed themselves they will never be economically independent, however politically independent they are. In the case of the politically independent countries they cannot build a stable system of government in a country that is dependent on the fluctuations of the commodity market. We've seen this in places like Ghana where the idea of giving Ghana independence arose from its relative prosperity for Africa which was based on the cocoa crop, when the price of cocoa slumped the country was thrown into chaos because the whole economic base was destroyed very rapidly. This is true of um.. many other countries, Kenya, Ceylon with its tea, lots of places like that, the other thing is that unless they are able to stop the penetration of western exports for basic industrial goods, relatively cheap industrial goods things like pots and pans they will never be able to build up an industrial sector of their own and so create a stable employment base, consequently there is very little hope of any real development that sectors peripheral parts of the western economy. Um.. politically they are faced, and it varies enormously from place to place, for instance in Africa they are faced with the enormous problem that if you look at the map most of the boundaries are straight lines they were drawn up a hundred years ago in Berlin at a conference of the great powers who simply allocated sections to each other. Without regard for the ethnic origin of the people who lived there, their religious and political differences, so that you very often have the situation where two states border each other

and large parts of the population of each state are perhaps a minority of each state, and, in fact, belong to a separate ethnic or national group, and these inevitably create political tensions in both the states. The one that's been in the news, because of the Iranian revolution are the Kurds, who live on the borders of Turkey, Iran and Iraq they are a muslim people but they are a very different people to their arab passing neighbours, consequently they have a sense of identity of themselves as a nation which is continually frustrated by the fact that they are forming minority groups in the population of three other nation states. This creates an inherent problem for any sort of development, but these people don't feel that they are part of the nations they belong to.

In Africa, you have it in somewhere like Uganda where the north is muslim and the south is christian, you also have the same problem in the Sudan, basically the problem arose because the, unlike the nations of Europe very largely, nations of Africa did not evolve. They are not true nations, they are simply geographical zones bounded by artificially decided borders. very often paying no attention to the facts, and I don't think you can have a politically stable government in the short term, at least, in these countries until the majority of the people in them have built up a sense of belonging to that particular political state, that particular political institution, as long as they see themselves as basically foreigners in their own country then you will have a problem of political instability.

INTERVIEWER

So you have got to solve the problem of identification for particular state first?

RICK

Yes, you've got to solve that, that's one of the first problems you've got to solve, the other one is, you have to liberate these countries from economic dependence on the west, this doesn't mean doing no trade with them, it means putting their export trade into context in the sense that it ceases to be the dominant sector of the economy. The great problem with somewhere like say Ceylon for instance, is that the tea gardens are totally dominant in the economy and so consequently you have the situation where the tea garden economy dominates all the

rest, to the detriment of every other sector of the economy. This has a bad effect, social, economic, political, the whole structure of the state. It's impossible for them to make coherent plans for long periods because the world market price of tea is the decider of how much money they have to spend on their development plans and this is an arbitrary price which fluctuates wildly, so consequently they are unable to establish a stable economy at home because it's dependent on external factors which are beyond their control. They need an economy which is fundamentally oriented towards their own country, of which the one particular crop for export ceases to be a central preoccupation of their economy they need to have the tea, the tea gardens need to become a very small part of their economy, relatively insignificant part. This does not mean that there will cease to be export of tea to the west, it merely means that in terms of their total economic output, their gross national product, tea will cease to be the dominant factor, and this is true of hundreds of states of the third world, that they are caught in this trap, where they have a single crop. In the case of Ceylon it's tea, at the other end of the scale, in terms of size, you have Brazil which, less now perhaps than it was, but for years was dependent on the coffee crop. Places like Argentine, or Argentina which for years virtually owed what development they had to the sale of frozen meat to the United Kingdom, who now find themselves with the United Kingdom buying most of its meat requirement from Europe, find themselves with a major economic bind, that they have no customers for their meat. This has nothing to do with the acts of the Argentine government in the sense that they can influence it in any way, they are stuck with the problem, the economy is geared to producing meat for the United Kingdom, or was geared to producing meat for the United Kingdom and this market has collapsed as far as they are concerned, it no longer exists as a viable market and this has social and political repercussions in the country itself. The case of their neighbour Uruguay which was part of the same economic system it's actually caused the collapse of democracy, because the economy

has literally collapsed in the hands of the government, there is nothing they can do because the whole of their economy was predicated on having an income in sterling from the sale of meat to the U.K. which they no longer sell consequently the whole meat industry has collapsed and since the countries were built up round a single industry, built up in fact, by investment from abroad, basically aimed at selling in the U.K. market um.. they are now stuck with an economy which has no real basis, and so their only hope really is to turn their economy over to the production of food crops for their own population and to some industrialisation producing some of the goods which before they would have bought in with the earnings from meat sales. But the problem here in the case of South America is that this has enormous implications for the way land is owned in these countries. Because they are basically countries with huge ranches owned by a handful of proprietors on which wage labourers of various kinds work growing the crops which, or herding the cattle which are for export now that has collapsed there is no work for the people who did that work. The economy has collapsed and these people no longer have jobs. The rproduct can no longer be sold and the only answer, the real answer is of course, to re-divide the land among the people and set up a system of peasant farming - grow labour intensive crops for local consumption. This, as I say has enormous implications for the ownership of the land and so consequently it is itself a source of social disharmony in the countries.

INTERVIEWER

O.K. So with respect to development of the third world would you say that entry into the common market has changed the development of the under developed countries?

BRICK

Yes it has because a large part of the former British and French empires largely geared to producing cash crops for consumption in the metropolitan countries and one of the effects of the common market is to get rid of, to close up off this market for agricultural produce to many of

these countries, this is true not only of the actual countries of the empire, one thinks of the Australians who have had problems which have been relatively easy for them to solve because of the growth of Japan, they have been able to sell, divert their production for sale in Japan, but for countries like the Argentine and Uruguay the West Indian islands that are dependent on sugar they have not been able or very easily able to find ways of diverting their production to other markets partly because the growth of sugar beet in temperate agriculture has meant that much of the market for cane sugar has disappeared anyway. Most temperate countries the United States, The U.K., western Europe generally, it's the beet producers who provide sugar and not the cane producers. Now the effect of that on the economies of the cane producing countries is disastrous, they no longer have a market for what they produce and the problem that goes with that is that the social and economic structure that underpins the plantation production of sugar for export is no longer relevant to that country, it no longer has any real reason and so they have enormous social and political problems which are based in the fact that they have an economic and political system which is rooted in the past, it's rooted in the history which no longer applies in terms of the economic system that they are part of. They are no longer producers for the U.K. market and so they have to look elsewhere um.. for whatever it is they're going to do. Again the logical thing is to go over to the production of crops for local consumption, the difficulty here is that these countries have a system of land tenure which was based on large scale plantation economies and it has created a social elite who themselves were rooted in the plantation economy and it's very very difficult, short of revolution for them to transform their social and economic systems and it's very difficult to see how they will succeed in doing this, the short cut is to find another market for the sugar crop but this simply freezes under development where they are, they are caught

in the same trap, except they are now selling their sugar to somebody other than their original market, but they are still caught in the same trap and it does not solve the problem of development again they have to reduce the single monoculture export crop to a marginal part of their economy, in the case of the West Indies it's aggravated because as with Southern Italy and Southern Ireland in Europe they have the problem of surplus population and always have had. Traditionally the outputs of this have been for the population to emigrate, this is becoming increasingly difficult for them to do so and so they then get the problems of mass unemployment at home which aggravate the existing problems. The other problem which is inherent in that is not being looked at, and it affects the North African in relation to France as well is that you produce a class of workers who are urbanised in terms of a metropolitan country, it is very difficult for instance to think of youths from Brixton with English educations and upbringing going back to the West Indies and setting up as peasant farmers, they just don't have the skills, they don't have the background. They would be as utterly helpless as an English boy going into exactly the same environment. They just lack the knowledge for doing the job. Indeed the people themselves there lack the knowledge to be peasant farmers because the only culture, agriculture that they have been involved in has been the growth of sugar. So what skills they have in farming are largely obsolete. They no longer can sell sugar so there is no point in growing sugar, therefore, they have to seek totally new way of running their economy, it can be done but the problem is that if it is to be done it can only be at enormous social and political cost, we can expect huge upheavals I'm afraid I'm not all that optimistic about third world development.

ger Strikers

INTERVIEWER

You know that there are prisoners on hunger strike in the Maze prison in Belfast. Obviously they have been classed as terrorists and they have committed various crimes. Do you think these prisoners should be given political status?

RICK

No because giving them political status is tantamount to recognising the legitimacy of the organisations that they belong to. If they have political status, then in effect it means that

they're prisoners of war and that in effect means that both the I.R.A. and the I.N.L.A are legitimate organisations. Now I disagree with doing it in the case of Northern Ireland, because I don't think it would help solve the problem of Ireland, not because I'm fundamentally opposed to the I.R.A. I think a lot of cant and hypocrosy is talked about this because many of the people disagree with terrorism are quite prepared to use it, or even have used it when it suits their own ends. If you look at it logically it makes very little difference to a person who is killed by a bomb, whether the bomb was dropped by men in uniform in a very expensive aeroplane or planted by a terrorist - it's equally deadly, um.. and most of the civilised nations have resorted to quite deliberate policies of terror bombing at one stage or another in their history. We certainly did it in respect of the Germans, where we set out to destroy their moral by the systematic destruction of their cities. The Americans obviously did it in the case of Japan where they followed exactly the same policy. We have supported what the technically terrorist groups in Europe in the last war, when we funded and supplied resistance organisations throughout Europe. If you look at the Hague Convention on the laws of war, these groups were illegitimate, they had no right to exist, they were people who followed civilian occupations during the day and acted as terrorists at various times. Attacking the garrisons and the individual members of the occupying forces um.. they are no different to the terrorists operating today. Taking perhaps an extreme case, Menachem Begin is strongly opposed to terrorists, there is still in fact a warrent out for his arrest, that nobody is going to enforce, issued by the British Mandatory Authority when they were governing Palestine and when he was engaged in terrorist activities against the Mandatory Authority and there is a warrent out for his arrest for murder. Now I don't approve of terrorism because I don't approve of violence of any sort, but on the other hand I think that one has to be very sure when one talks about terrorism that you are not simply saying that You are supporting violence by one side and not the other. Many

people in Ireland think that the violence did not originate with the I.R.A. The violence originated with the Ulster Authorities, it's often forgotten that the British Troops were sent in, not to protect the population of Ulster against the I.R.A. but to protect the Catholic population against the Royal Ulster Constabulary, who theoretically were the legal authority in the country. But whose attitude and whose bias against the Catholic population and their tendency to use excessive violence against them became so notorious that the government had to step in and troops from outside to restrain the police. That in no way is intended to whitewash the I.R.A. but the I.R.A. unfortunately exists again in a country like Poland which has a history of violent revolution. It has a history of violence, the I.R.A.. are not a new organisation they go back to the last century they have a long history of applying violence to what they see is the solution to Ireland's problems.

INTERVIEWER

How were they formed then, do you know? You say the last century.

RICK

They were formed as the Fenian Brotherhood in the last century. Their initial aim was, in fact I think I'm wrong in saying the 1880's it's probably slightly earlier. Initially they planned to establish an army in the United States to invade Canada and they were suppressed by the Canadian Authorities and the American Authorities but, they did retain a hold in Ireland over elements of the Irish Nationalist Party and there was an Irish party which operated as a political party in the British System which bought Irish seats for the British Parliament, which got itself elected to local authorities. There was a strong tradition of violence which went back beyond that the Wolf Tone united Irishman of the eighteenth century

INTERVIEWER

Sorry who

RICK

Wolf Tone

INTERVIEWER

Wolf Tone, is that two names.

RICK

Yes it's his name, his full name, during the Napoleonic wars he founded a society called the United Irishmen directed against British rule in Ireland and which favoured home rule for Ireland At that stage Ireland had only recently ceased to have a

separate parliament in Dublin , had this parliament emerged by an act of union, but the parliament which did that, the original Irish parliament was very unrepresentative by our standards, very much was the parliament of the protestants. To start with Catholics were forbidden to hold seats in parliament because they couldn't take the oath of loyalty, only members of the protestant churches could take the oath of loyalty to the English king and so consequently it was predominantly a protestant landowner parliament and of course, the vote, as in this country was restricted on a property franchise, it was not an open vote for everybody, it was limited to males who were over twenty one years old and held the appropriate amount of property. So that it was resented by many Irishmen when the parliaments merged. Wolf Tone was in fact himself a protestant but he formed a separate Irish organisation the United Irishmen which was sympathetic, not to Catholicism but to the French revolution and this was in the 1790's so obviously it put him at immediate loggerheads with the British Government which was at war with France. Revolutionary France. The British in fact suppressed it and after the Napoleonic wars the British reorganised the Irish police system to create a unified system of a single para-military police force. I mean this is again something which is often forgotten, when you talk about Ireland and that is that they have never had an unarmed civilian police force in Ireland except the Dublin Metropolitan Police. The police force in Ireland, the old Royal Irish Constabulary were an armed force, they didn't simply carry guns as an American police man did, they lived in barracks scattered about the countryside. They operated as a para-military and not as a civilian police force this is the great difference that is often missed because during the late part of the nineteenth century they wore very similar uniforms to English police but they differed in that every Irish policeman had a rifle and bayonet, places like police stations were equipped with small pieces of artillery and later on machine guns. They were designed to hold down an occupied population and consequently towards the end of the nineteenth century at the beginning of the first world war the para military

Organisations grew in Ireland and there's now two separate ones, the Ulster volunteers who are largely Protestant and Loyalist and the Irish volunteers who are largely Catholic and Republican. They openly paraded with fire arms before the first world war, so the tradition of armed force in Irish politics runs much deeper than most English people realise, the enormous tradition of uprisings certainly the famine of the 1840's through to the turn of the century, there were incoherent uprisings in Ireland - the peasants, which the Royal Irish Constabulary as it then was, was forced specifically to repress, it was not formed to hand out parking tickets or um.. catch burglars, primarily it was formed to repress, before becoming the Irish Constabulary it's original title was The Law and Order Corps or the Peace Keeping Corps and it was designed as a mobile para-military force which the authorities could call in when the local population got out of hand and this is the function they've had for many many years, traditionally therefore the Irish built up an opposition to it - a series of illegal military and para-military organisations like the I.R.A. so the I.R.A. although is a relatively recent formation by Irish standards, as I say relates to the Finnean Brotherhood of the 1880's it became a distinct organisation during the civil war in Ireland between the Irish elements which - or I.R.A. elements which had signed a peace treaty with Britain and those were opposed to it, who wished for a totally united Republican Ireland and the I.R.A. then became a distinctive organisation. But historically the part of the problem is that the I.R.A. is not seen as a terrorist organisation by many Irishmen, traditionally it has been a group of heroes in Irish folklore, people who fought for Irish independence and there are many differences between the present I.R.A. particularly the provisionals and the old I.R.A. but for most people in Ireland they don't see the differences only the similarity, these people are, as they see it fighting for Irish independence. Most Catholic Irishmen, and I'm not just talking about Ulster, but Ireland as a whole, resented the continuing British Presence in the north, even though the majority of the population of the north, the Protestants favour it, the bulk of Catholic Irishmen are bitterly opposed to it

and always have been. It's always been a matter of fact that no Irish politician since independence has ever dared to go to the polls and say bluntly that he was in favour of the status quo. It's actually written into the Irish constitution that Northern Ireland is a part of the Republic and it's only a matter of finding ways to settle the problem and bringing it back into the Republic. They don't see it as a separate country. That have a different concept of the law respecting Northern Ireland, and if you look, in fact, at the treaty, the 1923 treaty it was always planned as far as the wording of the treaty goes between Britain and Ireland that Ireland would eventually be a single united country and that the British presence in Ulster was a temporary presence which would ultimately disappear and the British would eventually hand Ulster over, as soon as the Ulster Protestants could be reconciled to being part of a united Ireland and this has been the continuing problem. I don't think though that one could give political status to the people in the Maze, and to get back to the original question - because the danger is that if you do so, then you encourage continuing violence and I think even that many Southern Irishmen are reluctant to see them given political status, whatever they say, because they do not generally speaking approve of the I.R.A. in a sense that they approve of its ultimate political aims - the Socialist Republic of Ireland. They do approve of the limited political aims of the provisional I.R.A. which is simply the unification of north and southern Ireland, but I don't think that the majority of people approve of violence and this is the objection I think, we all ought to be prepared to make some concessions but I don't think that we should give them political status because that implies some form of legality of the I.R.A. which I don't think we should give. Part of the problem is the I.R.A. could declare itself, if it were to come to some arrangement with these people there is nothing stopping another group setting up as the I.R.A. and starting the whole thing tomorrow and also you have the very clear problem that it is difficult to distinguish between legitimate - that's not perhaps the right word but political

terrorists and straight forward criminals. Particularly since the Irish para-military have financed their organisation with things like bank robberies. When does a man become a terrorist, what percentage of his take from his latest robbery does he have to give to the I.R.A. to be a legitimate terrorist entitled to political status as opposed to a straight forward villain. It raises too many problems, I don't think we can give them political status I mean there might be room for manouvre on prison discipline but I don't think we can give political status.

INTERVIEWER

O.K. Right do you have any hobbiesDer'k? or things that you do in your spare time away from work that really turn you on, that you are really sensitive to.

DERRICK

I've got a largish family which takes up a lot of my time.

INTERVIEWER

You've got what six children

DERRICK

Seven children

INTERVIEWER

Is that your hobby then? (laughter)

DERRICK

No I wouldn't say it's my hobby but I've got seven children and three grand children so I tend to have a lot of my time taken up with family related activities. I enjoy messing about with cars which I do, maybe because the car I run is permantly giving me problems. I enjoy messing about with that, I'm still fascinated by history, always have been.

TERVIEWER

Which parts of history, I mean political? or economical, economic history rather.

RRICK

Um.. I suppose social history because I straight away would say that you cannot break up the fabric into the political, the economical, the social - these things are deeply inter-twined we were talking about Poland earlier and I said there that their

Digression

history their religious, their political, their economic and their social history is such as to create a particular situation, you cannot separate the elements out. The trade union Solidarity may have political and economic objectives but it's rooted in the religious history of the people, I mean the Catholic church and to think that you can take it and say "this is nothing to do with the fact that one of the unifying facts of Polish life is Catholicism" One of the definers of the Poles as opposed to a Prussian or Russian is his Catholicism Um.. ethnically in many ways they are the same breed as the Prussians - the Prussians are not originally German speakers, old Prussian is a Slavonic language. They are Slavs like the Russians and yet they have this difference and this difference is basically they are Roman Catholics rather than orthodox or Protestant, and it defines them, it provides an organisational base, it provides a common linked moral language, moral code which is linked in the sense that these people speak from a whole area of moral discourse which is rooted in Catholic theology and popular Catholic religion. To try and separate that out from their economic, social and political life is ridiculous. The Catholic church is tolerated by the Communists in Poland and is recognised as a powerful force in Polish life by the Communist party, is to accept that the religious history of Poland is deeply inter-twined with its social and political history, and this is true of any country - take a whole element and say right we can take economic history and we can separate is absolutely ridiculous - economic history is tied in with the social history of the people.

INTERVIEWER

You don't just read history as part of your O.U. degree ?

ERRICK

No because it is an interest because I'm interested in other things related to it like politics I think politics is very strongly related to the history of people - the people have an idea of who they are and what they want to do with their life which is rooted in their history this is why political regimes often are engaged in re-writing history to suit their own line. Um¹ again to go back to the Irish question why the Irish provos actually rather than choose a totally new title took the letters I.R.A. Irish Republican Army because it's rooted in their history these are a band of heroes that fought for Irish independence

They wanted to form an historical link in the mind of the Irish people with this, with the people who held the General Post office in 1916 and one way of doing that is to...

INTERVIEWER

Who were they then in 1916?

BRICK

The I.R.A. the Irish volunteers, they changed their name to I.R.A. after that, they wanted to form this direct link with these heroes of the Irish Liberation and it was important to do that, to use those three letters I.R.A. which had an emotional pull on Irishmen. Their social and economic history is there and it's recognised by people it's a.. they play on it, politician if you like, who founded it and the related political party Sinn Féin recognised that the name Sinn Féin and the name I.R.A. have historical links that they will achieve a linkage in the minds of Irishmen with the glorious struggle to free Ireland from British domination, they had to make those links, it's almost sub-conscious you cannot separate people's history into compartments and say this is history this is politics, this is economics this is social. The things are interlinked. There would be no social history of the Lancashire cotton town if there hadn't been the economic development of the cotton industry, the two are interlinked, they create each other, anywhere you look, this is true. I mean the east end of London didn't just happen, it was built because London was a great port and it built docks on its eastern side, the east end grew up out and around the docks, take the docks away and then you have all the social problems of dockland they didn't exist when you had the docks, because the docks provided an economic base for the whole area take those away, the economic base which people think, you see you can abstract it, as soon as you abstract it you are faced with a mass of social problems that didn't seem half as terrible two decades ago when they had a thriving docks, because there was an economic base the social problems looked soluble in the context of that economy - take the economy away and you have a massive social problem that is what are all these people living here going to do. Social life is structured by the economy, in some ways the economy is structured by social life

INTERVIEWER

I can see that history gets you very excited.

BRICK

Yes one of the reasons is that the developing countries in some

ways to nationalised is that they haven't got a share holding property owning class in some of these countries . In some they have and they have problems, in many of them they just do not have a proper share holding, all the firms are foreign owned, this makes it relatively easy to nationalise because there is no internal opposition there is nobody actually who you are going to take shares off and this is related to their social history as a colonial country. They really do not own shares in the local companies, therefore, it's easy to take them away from their present owners and nationalise them because you don't have to fight any internal political groups over ownership the internal political groups have no interest in protecting the interest of the shareholders they're not shareholders themselves these so politics and social history and economics are inter related. What a politician can do in terms of what he can do politically, today or yesterday or tomorrow is related to the social structure of the company and the way that people perceive their history and social structure, how they identify um.. with groups and what they see as the essential components of their social structure . I mean the communist party did not attack the church in Poland because they were very early aware that the Polish church was central to the social structure of Poland, and what is more, that most Polish people saw the Polish church as so essential to their country that they would resist very determinedly any attempt to suppress it, therefore it became easier to make accommodation with the Polish church rather than have a head on confrontation. Whereas as in other countries in eastern Europe the Communists did suppress the Catholic church and were able to do it because it represented a minority interest and not an interest that was seen as central to that country's social structure so while Catholics might have protested bitterly over this suppression the Catholic hierarchy might have protested bitterly, the vast majority of people were untouched by it, they didn't feel it was terribly important, it was just um.. easy to do, I mean, in its extreme form in some places where the Catholic church was closely identified with the old ruling elite who had been allies of Hitler in places like Bavaria, it was extremely easy to suppress it because the bulk of the population were anti Catholic

anyway, even though they hadn't been able to express this, they resented the Catholic presence and so suppression of the Catholic Church was both cheap politically, and easily, I mean it was actually a way of gaining adherence, getting rid of the priest. People's, economic, social, religious and political history deeply inter-twined. How people react to things, how people react to different behaviours, we don't start our lives absolutely as it were, tablet erasure.

INTERVIEWER

Tablet erasure yes blank tablets.

DERRICK

Your Greek is obviously better than mine.

INTERVIEWER

Oh I don't know.

DERRICK

We start off with what we learn as children, with ideas that we imbibe about the social world, about what is right and what is wrong, what is acceptable and what isn't, and this is why I said about the dangers of violence on television is that it begins to present the violence as acceptable means of achieving certain ends.¹ Once you begin to present that picture, of killing people, maiming them beating them up, are means of achieving, of overcoming opposition and achieving particular objectives, then you create a very dangerous situation indeed, because it then becomes part of the consciousness of the people that violence is an acceptable method, as it has in some ways in some places like Poland and Ireland where they have a history of armed struggle against repression, you see, the legitimacy of the I.R.A. in the eyes of the Catholics is based on the fact that it was armed illegal bands who for two hundred years fought the English for the liberation of Ireland. So they are able to present themselves and quite consciously do so. As I say they haven't actually broken with the original I.R.A. which still exists but doesn't do any fighting. The provisionals have quite deliberately usurped the use of the letters I.R.A. because they know the emotional pull they have with Irishmen because they are rooted in Irish history. They are very conscious of the historical roots of those things.

This is another reason why the Catholic church has been ambiguous in its condemnation of violence by the I.R.A. is because it is very conscious that the Catholic church has traditionally been closely linked to the nationalist movement and that its strength in Ireland is very much its links with nationalism. That the loss of those links would put the Catholic church in jeopardy in Ireland. If vast numbers of Irish men who emigrate to the United States or Great Britain remain Catholics because of the link between Irish Nationalism and Catholicism, if that link was seen to be broken they would then or are likely to very quickly become secularised the Catholic church has been loosing adherence, this was masked in the 50's and 60's by the number of Irish men emigrating but in Britain they have been losing adherence despite huge Irish migration to this country between the 50's and 60's they only just managed to hold their numbers with a slight increase, because while first generation Irishmen will remain practising Catholics, second generation Irish will not, they were along with their English contemporaries drifting into a secular world. You see the thing is Catholicism kept its hold on the Irishmen particularly many of the second generation, it did keep its hold because of its links with the Irish identity, to be an Irishman was to be a Catholic and so there was a historical link and it's very important to people. Most people don't particularly like history, most people have a very or relatively well developed sense of their own history. It may be false history in the sense that they don't know the facts but they have a set of historical myths, if you like to help them identify their place in the world. Central to an Irishman's identification to himself as an Irishman as opposed to an Ulster man or an Englishman or a Briton. We some identification of the Catholic church. I am an Irishman and therefore I am a Catholic. The two are interlinked, they're not separate compartments he can't.. all the ideas that go with that are pressured by the English of both the Catholic church and the Irish nationalists the abuse of Ireland by the English they are all linked together they are a single thing. A single pattern and it often comes as a surprise to an Irishman to realise that the first English exploiters in Ireland were themselves Catholics and that in fact

adherence to Rome was bought back to Ireland in the eleventh century by invading Normans and Englishmen. The Irish church had developed almost the separate church from Rome because it had been cut off for years by pagan England, it was invading Englishmen and Norman leadership that bought the Irish church back into the Roman Catholic order. This comes as a surprise to most Irishmen because they are brought up to think of England as the anti Pope and Ireland as the centre of the true Catholic faith. People have these attitudes, history is terribly important because it is how we define the world. I really don't like the idea... I can see on small projects where it makes sense to split and to look at the economy or the social structure or the political structure of a country or a historical period. it makes no sense in the long term to totally split them off because they interact. People's behaviour... I mean there would be no labour party in Britain without the industrial revolution because essentially there would be no urban proletariat as its power base is essentially the political party of the urban workers. It would make no sense to have such a party without the industrial revolution indeed there would have been no formalised political party without the industrial revolution and the consequent breakdown of the old system of political patronage under the old wigs and the Tories. We had to go back and realise that it was the changes in the economy and the changes in the social structure that creates political parties that creates, things like politicians exist to articulate the feelings of political groups in society. Political groups exist because there are groups of people with shared interests and by interests I don't simply mean interests in the sense that I'm interested in history but shared interests in the sense that they share social or economic situations which puts them in a particular relationship to power and to the society and the state and so consequently they want to form a group, a political group which will articulate their views to the state. We have been brought up and one of the things which is very central to our thought, because the economic idea was central to

the industrial revolution, it was central to Victorian politics, we've been bought up to think in terms of class politics, this isn't necessarily so in other parts of the world where there is not an industrialised nation politics can revolve around all sorts of things, they can revolve around religion, they can revolve around ethnic groups or tribalism in the sense that we were talking about one of the minorities I mentioned earlier the Kurds a very rich Kurd can identify politically with a Kurdish peasant or shepherd because in terms of their political relations with the Iraqi or Iranian or Turkish state the important salient feature about them is not their relative wealth or poverty but their Kurdish ethnic grouping, therefore, their political interest is better served by seeing themselves in terms of the Kurds, rather than a land owner or a peasant. Essentially it is their Kurdishness which identifies them over the rest of the population not their economic situation as such although that is related. They are discriminated against as such although that is related I mean, they are discriminated against economically so that they find it very difficult to get good jobs or to get into the higher reaches of the civil service or the professions but none the less it is their Kurdishness which they identify with and not their class status as such and this is true in other groups. In the southern United States it was not the identification of sharecropping farmers as such which led to political change, but the fact that a substantial part of that group a substantial part of the suppressed rural proletariat was black, which immediately gave them an identification they could identify with each other so that within the context of black politics, wealthy black business men in Chicago, I mean there weren't very many such, but there were some, would identify with a southern sharecropper because they were black, they shared the fact they were discriminated against and were treated by the rest of society, and this is the very important thing where the social thing comes in, they were treated differently by society by virtue of being black, not by virtue of being rich or poor, it was the mere fact of their blackness which identified them as a social group, so they were able to form political structures like the Southern Christian Leadership Conference around the National Association of Advancement

of Coloured People, around the fact that they were black, it was the black identification that was more important than the social class identification in their case. This does not always follow, it depends very much on the way the country's central attitudes are towards ethnic groups. For instance the Welsh as an ethnic group in England are virtually non-existent in the terms that they do not feel as separate in England, the Welsh living in England do not feel a separate political identification to the English people around them. They identify with the Liberals, the Conservatives or the Labour party according to how they perceive themselves in terms of class position and their desired social structure for this country. They do not feel that they see themselves as Welsh perse. In the way that blacks in the United States have perceived themselves as it were, as a separate political entity, as a group which shared a common interest regardless of their economic or social position in some ways, they have a shared common interest in that blacks are a definable group who relate to the state and political and economic power in particular ways, and so they have a shared common interest there. In Scotland the Scots Nationalist are in fact people who are asserting a separate Scottish identity over and against identities with other groups, in other words they're saying in effect that somebody like Fraser of the house of Fraser which is a huge multi-million pound business but is a Scotsman, should share a common identity with somebody like Jimmy Reid who is a shop steward in Glasgow, I mean these two people have something more important than the fact that one is a ship yard worker and one a multi-million pound businessman is the fact that they are Scotsmen and they ought to share a common identity as Scotsmen over and against their class identity. Their class identity is less important because whatever relative class interest they are, because as Scotsmen they have an interest in protecting Scotland against or the Scots against discrimination and misrule from England, and they have not been tremendously successful in putting forward that thesis, this is the sort of concept of politics which is not class based concept which we are used to in this country. We have become used to a particular set of concepts about our politics, I'm not saying that they are wrong or right but they are rooted in the facts of our economic and social history that we have a class structure which is such that

there are groups which feel that they are antagonistic to each other and consequently identify with political groupings who they feel ought to articulate their interests in relation to the state.

INTERVIEWER

So we can safely say that history is your main interest.

DERRICK

I think it is a very important interest.

Advice to someone getting married

INTERVIEWER

Right then Der'k would you be able to, or can you be able to offer any advice to somebody getting married?

DERRICK

Um.. Well I think you can offer people abstract advice.

INTERVIEWER

Well not necessarily advice but a recipe for someone getting married.

DERRICK

Of course, the short answer is don't.

INTERVIEWER

Really! well you can continue along that philosophy if you like.

DERRICK

Well marriage is not a thing which you can abstract about. It's very much a case of two people who are prepared to live together and work together over a very long time and nobody can be absolutely sure that it'll work. You just cannot know, cannot hope to know for certain that a particular marriage is going to work because well apart from everything else, everybody changes, I got married for instance when I was seventeen.

INTERVIEWER

So you've been married now what.. you're forty one now so you have been married twenty four years. - nearly up to your silver.

DERRICK

Yes I'm nearly up to my silver wedding anniversary, but I'm conscious of the fact that I have changed over twenty-five years, I was little more than a boy when I got married and over that twenty three, twenty four years obviously I've changed in lots of ways. Not simply got older, I've changed in.. my views have changed.

I think anybody's views must change over a period of time if only because changes in other things make things obsolete, my marriage has changed in its nature obviously because once we had quite a lot of small children and now we haven't got any children under sixteen, our children are all grown up, four of our children are married. This changes everything it makes enormous differences. I've changed my job two or three times since I got married, I'm in a totally different sort of work to the type of work I did all of my married life. So its very difficult to see ahead, basically its um.. to stay married you need a certain amount of humour and you ned to be fairly flexible because I don't think that you can plan ahead rigidly I don't think that you can say we will do this and we will do that, you've got to accept that at any point in time circumstances can change and I think to stay married you've really got a situation where you've got a permanent partnership and you've just got to make things work.. I think the important thing is to quite early on work out how you're going to do this and how you're going to learn how to tolerate each other because living with one person can get on people's nerves, it very quickly does, if I was shut up in here with you for twenty four hours we'd probably be screaming at each other at the end of it.

ERVIEWER

Oh really.

RICK

Well perhaps not for twenty four hours perhaps a little longer, but if you were totally isolated with a person of whatever sex or background, you would eventually build up one of two situations, you could have a situation rather becoming so intolerable that you want to kill the other person or you would eventually work out a situation where you could tolerate each other. Now the way you learn to do that is you learn to accept other persons faults I think this is the greatest problem in marriage is that when people are courting, perhaps less today, you only learn very largely of the good side of the person in effect courting is an extended job interview, where you try to sell yourself to the other person, you try and say what a good husband I would make or what a good wife I would make.

INTERVIEWER

Well, I've learned something anyway..

DERRICK

At the end of that you actually have the situation where you settle down together and you say um.."Oh dear this is not what I thought it would be like, I thought you would be more interested in doing this, which I want to do" and she's not, she wants to do something else and you've got to learn to adapt, you've got to learn to tolerate the fact that two people will not always share every interest and that you cannot have a situation in which one partner is totally dominant, or very very rarely.

INTERVIEWER

So you would say that tolerance is quite a part.

DERRICK

Tolerance yes, and the other thing is not to be too sort of possessive and jealous, not to want your partner with you all of the time, because this is never practical, I mean if one of you goes out to work you are going to be separated for the working day and if you spend all your time with one person, you very rapidly run out of topics of conversation because neither of you are doing anything to tell the other person, its only when um.. well I think one of the healthy things about wives working is that you then have two totally separate spheres where you can come together and talk about your work to somebody who doesn't know very much about it but is interested enough because it interests you and therefore you are able to talk about things that are outside their experience, you can teach them something if you like every day because you learn something yourself, as well as they have things to tell you which you wouldn't know without talking to them. I think that's terribly important because you otherwise very rapidly run into a situation where you have nothing to say to each other and I think the greatest enemy in marriage is not arguments, its just boredom most married couples who fall out fall out because they have been totally bored with each other. This is why physical attraction alone is a very dangerous basis for a marriage because it rapidly becomes boring and um.. its like clothes, you buy clothes, women are more prone to this than men, this may sound a bit chauvinistic, they buy a dress and they think it's

marvelous, the first couple of times they wear it and after that they are bored with it. If they were just physically attracted to a man they will rapidly become bored with him because there is nothing about him beyond his physical once that has gone, what is there? there's nothing, there's no topic of conversation there's nothing. I think the main thing if you are going to get married is to make sure that you find the other person's faults and not their virtues tolerable. Their virtues are, people's virtues are nearly always tolerable unless they're perfect and the person who is perfect is never tolerable. But you've got to be able to tolerate other people's faults, you've got to find out really before you get married whether the person has a temper and what sort of temper they have are very quickly irritable, are they sulky. When they are in good humour almost anybody is tolerable in a good humour. It's the problems with people when they are not in a good humour that you have got to live with and you've got to really know otherwise life can rapidly become unbearable for you if you're living with somebody who's bad temper and sulks, or outbursts of rage you find utterly intolerable. I think it is more important to work out how or whether you could tolerate them than whether you're madly in love with them, I mean that's nice but it's not the essential thing because ultimately that is going to wear off, not cynically but in the sense that, that sort of emotion is something that is inevitably temporary and we can be madly in love with somebody for a few days or a few months or even a few years but you cannot maintain that level indefinitely, I mean it's just like saying run a mile in four minutes, but that does not mean that you can run ten miles in forty minutes you know, you just cannot keep up that sort of pace and you've got to look at the future when you are going to be plodding along together perhaps with children, a home, bills and all the problems of the world that happen to people and say "well can we get along with each other in these circumstances or are we going to fall to fighting each other um.. I don't think that you can... I don't think that you can sort of give people very generalised advice on marriage, is a way of answering your question. If you were specifically to ask me

about should you marry a particular person who I knew fairly well and agreeing that I know you reasonably well, I might then be able to say or give a reasonable answer because I could look and say "will Jenny get along with him in say, twenty years time, how is Jenny going to develop as a person and how is he going to develop, and are there going to be insoluble clashes of personality and interest, because if there are then the advice is don't get married", if on the other hand it is obvious that you are the sort of people that are going to be compatible over twenty, thirty years, then "yes go ahead", you see, you've got to really look at the individuals concerned, you cannot say to a man and woman or boy and girl "yes this is how you should go about getting married", because whatever formula they have for marriage they have to adapt this to their partner, marriage is about two people and they have to have at least some shared basis, some reasonable basis and you cannot give generalised advice, it has to be about two specific people.

INTERVIEWER

Right then Der'k, can you outline what you think your job involves or entails?

DERICK

Yes I hope so, I've never actually had a job description in detail.

INTERVIEWER

No, what you personally think it involves.

DERICK

Well the main object of the job is improving the dissemination of I.E.T. research, it's mainly I.E.T. research, if you like - institutional research throughout the O.U. it means: running the information bank, trying to improve it. In some ways it's pretty similar to a librarians sort of job or an archivist but not entirely, it involves getting as much information as I can about what is going on in I.E.T. and trying to collect the documentation of that information together in the information bank and hopefully improve on that so that it becomes available in a usable form to people who work in the O.U. whether research or writing courses or whatever and to acting as a person who operates this resource so that it is available for the use of the people who it ought to be available for the use of. That is to say members of I.E.T. members of the faculties

who need this information to do their jobs.

INTERVIEWER

O.K. Would you say with respect to the current affairs topics that we have discussed, that you are interested in them?

BRICK

Yes.

INTERVIEWER

Are you very interested or are you just interested?

BRICK

Um... very interested because I've always been interested in politics or current affairs, because current affairs you say that history is the thing that fascinates me, current affairs are history being made so yes I am very interested in them.

INTERVIEWER

Would you say you are very well informed?

BRICK

I would say that I would be better informed than average because I take an interest I would not say I'm well informed, I think that the more informed you become the more conscious you become of the enormous gaps in your knowledge. um.. for instance you talk about the Polish situation - I don't know Poland, I don't know a lot of Poles. Certainly I've never been to Poland and I don't speak Polish and I'm aware that those facts create a barrier between me and what is happening in Poland because I do not entirely understand Polish attitudes. In a sense I look at them and must guess at what is going on because to truly understand current affairs as I suppose to truly understand history, You have to be as it were in the minds of the participants in order to see the way that their perception of the world is important because their perception of the world is what they are acting on. We do things because we perceive the world in a particular way and current affairs precedes the problem that unless you can get inside the minds of the participants and this is always easier with people from your own culture it's easier for me to understand Mrs Thatcher than it is for me to understand Lec Walensa - it is much easier for me to understand Mrs Thatcher because she and I share a common language (laughter) we share elements of common history and culture - I can relate to her in the sense that I can

categorise her I can understand what she means in terms of British politics, where her ideas come from, what they are rooted in, um.. these things I can understand about her in a sense that I do not understand about Poles because I do not know Poland well enough to be able to grasp the whole of their world view. They are too far away from me, the gap between me and them is too great for me to entirely understand. I try and keep informed but that information is limited because there is this barrier of culture and language which means that I cannot entirely understand why they do things in a particular way or what particular thoughts are going on in their heads and that I think is an inevitable problem. I don't think it is totally soluble if I was really deeply interested in the Polish problem then obviously I would go and learn Polish and to talk to as many Poles as possible from as many different groups as possible this is again a problem that even if you look at the people who do speak Polish is that they tend to get their information from particular groupings within Polish society and as a result they get a biased picture and this is the almost inevitable if the only Poles you speak to are the leaders of Solidarity then you will get a very different of Poland than if you speak to leaders of the hard line faction of the Communist party in Poland. But both groups operate within a Polish culture and probably find it easier to understand each other than they do to understand outsiders, just as we find it easier to understand people who do not share a common culture with us. Even where they share a common language like the Americans or in effect the Irish, although they talk of having a second Irish language they in fact use English as their standard language and it's very very clear I think to any of us when you think about it for any length of time that there is this enormous problem that we do not share with the bulk of Irishmen - a common culture, or a common world view and consequently there are all sorts of misunderstandings between the English and the Irish which arise from the fact that they appear to be similar to us, but in fact they are not similar to us and so we misinterpret Irish information because we interpret in our own terms - we look at Irish men as almost as it were as a region of England and it is not they are a very separate culture and we fail to understand that separateness and that is one of the problems, but I would say on

the whole I'm reasonably well informed by the standards of this country but I'm conscious you know, that there are huge gaps in my knowledge which arise because I have to make interpretations based on my information and my knowledge which is largely limited to my own culture. I can only perceive things through my own stand point and not from that of a Pole or an Irishman and they have obviously very different views of the world and the nature of the problems than I do.

O.K. thanks then Derrick.

INTERVIEWER

T R A N S C R I P T 8Interview with GenePOLANDINTERVIEWER

Right then beginning of the interview with Gene. .

Gene , how do you see the situation in Poland at the present time?

GENE

In Poland at the present moment, well the situation is rather bad because the Russians want certainly assurances that they are the bosses, so whatever the Polish people (if I can speak of people) does or do, makes no difference whatsoever to the situation. The situation is worse because the Europeans have decided to send Poland some food and this is the worse Possible thing they could do because in this way they lengthen the struggle of the Polish people against the Russians, they should really stop sending anything to Poland Humanitarian or not humanitarian, it's ridiculous business, it is not humanitarian to have the Russians on your back, so therefore, you've got to break the situation.

INTERVIEWER

Do you think the history of Poland is important in answering this question?

GENE

That Poland will . . ?

INTERVIEWER

Do you think the history of Poland is important in answering the question?

GENE

Yes, the Poles were always (well for a long time) under the Russian domination as well, Poland was divided by the three powers: Prussia, Austria and Russia and the Russians mal-treated the Poles all the time, so in 1848 when the great revolutions - revolutionary wave in Europe swept over, the Poles also rebelled and, well of course, the Russians were much stronger, they put down the rebellion and the Poles never forgot it.

INTERVIEWER

Do you think it is significant that we've got a Polish Pope?

GENE

A Polish Pope can probably help in as much as he understands the Polish people. The Pope itself has got to die, no tamper or power and no other sort of power; formerly he had at least power of persuasion, but today religion - especially in Russia is a non existant thing, so why should the Pope be helpful. Stalin during the war asked (when there was confrontation between the Pope and Russians) how many battalions has got the Pope? and so it boils down simply to that - persuasion means absolutely nothing today, it's brute force which matters.

INTERVIEWER

O.K. right to change the subject - you can sit back it will be recording O.K. - to change the subject um have you got any views about violence on television?

GENE

Violence in?

INTERVIEWER

On television.

GENE

On television, well for me the violence is only a play, but for many people, especially younger people who are in this way encouraged to use violence themselves, um because violence is condoned today by the authorities with different pretexts, so therefore, it doesn't leave you anywhere really to combat violence except if you just don't show it. So why do you show all the time the I.R.A. violence, by this you just give the I.R.A. the opportunity to make propaganda.

INTERVIEWER

Yes, what do you think about the violence in television programmes for example, the Professionals or Kojak?

GENE

Ah it boils down to the same thing if you look at today's paper, you will see old age pensioners mal-treated by muggers in the street, where do they learn all these tricks? naturally in television, so television enhances mugging, if on the other hand they would show that the police is really

swooping down on these muggers, or on the violence like you have in these American films, you know where the police is always victorious, then probably violence wouldn't be so big, but of course, this depends on the general circumstances of the people concerned.

INTERVIEWER

Would you say that sports like boxing, or karate or judo could be called fringe violence?

GENE

Um . . . I didn't quite get that

INTERVIEWER

Would you say that sports like karate or judo or boxing, could be called fringe violence?

GENE

Well I am not so sure about that, I haven't thought about that really.

INTERVIEWER

I mean they are violent acts aren't they?

GENE

Yes.

INTERVIEWER

But would you say that if teenagers and young children watch boxing on a Saturday afternoon for example on the television, would you say that encourages them to be more violent?

GENE

Yes.

INTERVIEWER

You would say so?

GENE

Naturally, yes I mean violence as such is human nature, and you cannot eradicate it because it is human nature, you can perhaps soften it by giving them other channels and not human against human, if you do that you may in a way avoid it, but violence was always part of human history, you just look at the middle ages, and even last century, it is always fighting. The only way to avoid this, to give the young people at a very early age a direction where they should fight, that

means something which you want to avoid eventually, but once you want something to go in one direction, that you can do. Now before the wars, before the second world war, you had always in boys papers - heroes, who were fighting against certain packs of people and therefore, all the young people wanted to be heroes and they didn't want to be just muggers, but today this is the whole point, it's muggers that they want to be.

INTERVIEWER

You think so?

GENE

It depends naturally on the families, but you see, it depends to a very large extent on the schools, and the schools, the comprehensive schools, as the name indicates, comprehend a lot of these children who are muggers themselves so the others are just ringed, and if you force people, even from better families (when I say better, I do not mean money or anything like that) even if these better family children go there, well, they end up in the same way.

INTERVIEWER

Would you say that children who watch a lot of violence on television, say for example programmes like: Kojak or the Professional, and watch violent acts on television like boxing, violent sport, would you say that the act of watching violence and violent sports probably sort of encourages violence in that family set up?

GENE

Sport in general is a violent thing, because it comprises competition and when you are competing and really competing you put your whole physical and mental power into that act and therefore, when you have competitors paid for the competition, they must be better than the others, otherwise they don't get a further job, so if you have a tennis star he becomes a trophy for the very simple reason that he earns a lot of money, but when he gets a trophy then he gets to be violent, look at the case of Macenroe for instance and this

goes for football and other things too, as long as it is a sort of a friendly play between two opposing teams of a school or a little village the thing is all right, but the very moment today we are reaching the same sort of level that the Romans reached in their arenas it is a question of life and death.

INTERVIEWER

O.K. thanks very much. The other month I think it was in August, a fellow crossed the channel using a balloon with solar energy, I don't know if you read about it in the newspapers

GENE

He flew over the channel in a balloon

INTERVIEWER

That's right in about two hours

GENE

I vaguely remember I read about it yes

INTERVIEWER

Would you say that ballooning is likely to become a form of travel in the future?

GENE

Well to own a balloon costs a lot of money, so therefor, ballooning as a sport could be only done if some club which got probably good backers, owns a balloon and people can do it. I personally don't think that there is anything in it because the wind goes as she likes it, not as you like it, so therefore, pure ballooning for me is not really a sport. It is a different thing for instance - hang gliding because there your physical prowess is the prime mover of your vehicle and it goes where you want it to go, if it doesn't it's your fault. In case of the balloon the wind may be this way or that way, you can't do anything about it, so I do not think it is a sport, for me sport is any activity of a human, or of a dog, if it has got a purpose which he can achieve, provided he wants to achieve it, whereas with the balloon you hope to go to France and you start coming down in Ireland, so I mean in this way it is not much sense.

INTERVIEWER

In actual fact this balloonist used solar cells, so in actual

fact he flew over the channel using solar energy as such, admittedly it was a special type of balloon in so far as it was double skinned, but um . . . solar energy is being used a lot these days with respect to solar heating projects, especially in the Milton Keynes area of England. Do you foresee that many people in England will be installing solar heating mechanisms and technology in their houses in the future?

GENE

Well . . .

INTERVIEWER

Do you know much about solar heating? because you are an engineer.

GENE

Technically speaking, ballooning as it is done today can have two different aspects, either you use a very expensive helium gas which keeps the balloon up, in this case there is no sport really connected to it, because you pay for the balloon and then it goes wherever you like, the other thing is the hot air ballooning, where it started already in 17 something by the brothers but this ballooning business as such was at the beginning most interesting because at that time they didn't know anything about air and flying so it was a necessity a first to go ahead, later these ordinary balloons were substituted with other balloons which had got a gas filling in it and also they received later on, applications with machines and this culminated in the zeppelins in the Germans, which were dirigible balloons in fact, and it went where they wanted to go, now this is naturally an approach which was very important but that has nothing to do with sport, only in as much as if you say one construction was better than the other one but it is not a sporting undertaking with the sport as the thing, whereas other air sport like light planes or anything like that, though motors are in the offing there, nevertheless it is a sport because you direct your little plane wherever you like at the speed which you can obtain, or not obtain depending on your machinery and the same thing applies naturally to like a motor car, you do racing, though you have a motor it is your

personal skill which is tested in the game, whereas in a balloon your skill is only in as much required to keep the whole thing up in the air, but you have got no power to go where you want to go.

INTERVIEWER

I don't know if you know anything about solar heating

GENE

Solar ?

INTERVIEWER

Heating in houses

GENE

Solar heating yes

INTERVIEWER

Well there's quite a few solar heating projects going on near the Open University in Milton Keynes where in actual fact solar energy is used to heat the house, do you think that solar heating technology is going to catch on.

GENE

Solar heating technology is very much developed in countries where they have got sol that is light. In England I don't think this has got any future. In California in America, Utah, in Israel where you got plenty of sunlight, it is a very good proposition especially in countries like Israel which has got no oil and where the solar energy is used for heating water and heating up houses, solar energy can also be used very favourably when you've got an equipment that cannot be looked after every day such as radio repeater stations, so you get there a solar generator and if even it costs far more than an ordinary generator it pays because you haven't got to look after the plant. But in our climate you've got to have such large solar panels that it wouldn't pay really, only, not even in a long period it is only a question of heating material, of course, when you are cut off you've got no coal, you've got no oil then it is a possibility to use it because it is a standby, but if you've got ordinary energy sources I don't think it has any future here, it will have a lot of future in the near East

or in the East or in hot countries, Africa or anywhere else where you have got a constant sunlight in contrast to England, look out and you see what happens.

THIRD WORLD

INTERVIEWER

Right thanks very much, have you got ~~any~~ views, Gene on the development of the third world?

GENE

The third world?

INTERVIEWER

Politically or economically

GENE

Well I have been visiting black countries, I have seen the whole thing and my views are very pessimistic.

INTERVIEWER

Really?

GENE

The reason is simply this: that the people want to do the same things which Western countries have achieved over a thousand years and you cannot do that in a few years. The proof of it is this, that a so called freedom was given to these people about thirty years ago, and in Africa about which you speak really, because the third world is Africa, in Africa in these thirty years there are probably now fifty countries, black countries, and not one of them has got a democracy, now all these people constantly hark on racial discrimination, but racial discrimination is the greatest in the black countries, and a white man cannot get a job and if he is there he is chucked out, and the latest addition to the third world is Rhodesia. Now Rhodesia was beleaguered by the Western world for ten years, nevertheless their economy flourished, now it has changed its name and all in two years their economy has receded to such an extent that they come with cap in hand asking for money - well that tells you the whole story.

INTERVIEWER

Do you think for example: that third world countries should change in a cultural way?

GENE

Definitely not. They will not be able to change because the whole system is tainted with hatred really of what we call culture. They want to adopt our socialist systems without knowing how these social systems work. As a matter of fact, none of these so called ideal social systems ever worked, not even in Europe, then you get Poland, where the working population is against the working government.

INTERVIEWER

Would you say that relief organisations such as Oxfam and Tear fund who do seek to help third world countries are in actual fact, just a drop in the ocean really.

GENE

For me, Oxfam and all the organisations are political organisations and they are the worse thing that can happen. The third world can be helped only if they allow other people (not exactly white, can be yellow or brown or whatever it is) to do private enterprise. A state cannot operate any sort of um profitability, neither the French Railways, nor the English Railways, nor the German Railways make money, they all lose money all state enterprise in every country loses money, and if the state takes over everything like it is in the communist countries now, you see the consequences, neither Russia nor the other people have got anything to eat, let us look at the American continent, whether you look at Canada or the United States, they can feed the whole world, why? because the farmer works for himself - not the state, so I think every man and woman knows best what is best for her or him, that means everybody is in fact, born what you would call a capitalist.

INTERVIEWER

Yes. Have you got first hand knowledge of third world countries, have you been to some.

ENE

Yes I have been to Jamaica and I have been there on gatherings with the then Prime Minister Mr Manley, of course a Left winger as you know. I saw the governor and so forth, and whilst

we were there it was more or less the end phases of the socialist experiment, in the shops you couldn't buy bread, there was no rice, everybody was really desperate, mugging in the street all the time, it just did not work. Now there is another regime there, also indigenous regime and that will probably work, but the man says "everybody go to work for himself"

HUNGER STRIKERS

INTERVIEWER

O.K. something different, the hunger strikers called off their strike in the Maize Prison in Belfast four weeks ago after ten hunger strikers had in actual fact died, they'd committed suicide virtually, um . . . would you say that the hunger strikers had achieved political status?

GENE

The hunger strike was a propaganda experiment, if people like the British government fell for it, that's their funeral, they should have let them die and they shouldn't have made any propaganda in the papers, not mentioning them at all, if they wouldn't have mentioned them at all there wouldn't have been a hunger strike because it was a propaganda exercise, besides, the whole situation there, is such that for the ordinary folk, they wouldn't understand.

INTERVIEWER

Would you say that the hunger strikers sort of saw themselves as prisoners of conscience? They wouldn't view themselves as terrorists would they?

GENE

Well I personally don't like force, so therefore, for instance to say that the hunger strikers would be forcibly fed, that question doesn't arise, as I say it was a propaganda exercise and if they wanted to die, like the Christians died in the arena of Rome and not a propaganda exercise - it's up to them. Of course, we say today "those martyrs" and of course, the I.R.A. say also "those martyrs" and that is all to it.

INTERVIEWER

So you would say that the hunger strikers were um . . . would call themselves prisoners of conscience? they wouldn't see themselves as terrorists as such.

GENE

Well the hunger strikers had very strong convictions, otherwise you wouldn't die for something for which you hadn't got convictions, but it was a futile experiment, and if, for instance the British government wouldn't have been the British government of 1980 but shall we say of 1880, the whole thing would have not happened at all.

HOBBIES

INTERVIEWER

Have you got any hobbies or pastimes which you indulge in now you're retired, can you tell me why you indulge in them?

GENE

Yes. Well you see the point is this, when you retire you must have hobbies, you must have something which occupies your mind and your body, and it is completely irrelevant what your hobbies are, you may collect stamps, you may tend your garden, you may do both and that's it. But, most of the people are so intent on their career, that during their career nothing else exists but the science of that particular field in which they are working. I use the word science, but it is the same for a writer or a poet, he is not interested in anything else. Now: when he reaches the age that society doesn't want his services any more, that means when he is retired, retired forcibly or retired by himself, then he cannot look after the books of the firm, he cannot look after the technology of a firm, he cannot look after the railways and he cannot look at anything like that, therefore, before he retires he must choose for himself not one but several hobbies, hobbies which on the one hand exercise his mind, hobbies on the other hand which needs certain physical prowess and if he is clever Hobbies of a third kind - how to make money

INTERVIEWER

(Laughing) yes so what are your hobbies then, what were your hobbies when you were lecturing, what was it in engineering?

GENE

When I was lecturing I had no hobbies, I prepared my hobbies at that time.

INTERVIEWER

Which were?

GENE

My innocuous hobbies include stamp collecting and books and coins, which are all connected with the development of our culture, culture in every sense, that means of the technical world and the world of poetry and so forth, that is this way - through stamps and through coins you can follow the ages and the propaganda exercises in the ages and you can see the proof because history is re-written by every political party every twenty or thirty years, so things which happened in my lifetime I heard so many different explanations for them. The other thing is, you've got to keep fit and this is important as the Latin says 'mens sana in corpore sano' a good head is only when you are fit physically, so you must have some hobby like that, you can play something like golf or another thing, or you can tend your garden, or as my neighbour does, he sweeps the streets so he has a big house.

INTERVIEWER

(laughing) he just sweeps his leaves up do you mean.

GENE

Yes.

INTERVIEWER

Have you got any more hobbies, you like skating don't you? things which involve other people.

GENE

Well I like to travel a lot and one of my principle hobbies, I like languages because through the languages I can fathom other people's behaviour. Now it is a great mistake to think that languages are only there to understand the other people, you see, when I speak a language which I know well, I do not speak about school languages, school - but which you really speak then when you speak that language you form part of that society, if you speak really french and you've been to France and you speak french you become for that moment a frenchman

you are for everything what the frenchman says, in ten minutes you speak english and you wake up from a dream that was there and you become an englishman, and if you speak some other languages which are not european languages, you become a savage which happened to me.

INTERVIEWER

So more or less you say that your hobbies are now what? stamp collecting, coins,

GENE

I beg your pardon?

INTERVIEWER

Your hobbies are really stamp collecting and coins and gardening.

GENE

Yes. I do some gardening and um . .

INTERVIEWER

Would you say your interest in the University of London standing committee is a hobby?

GENE

Yes, of course, that is one of the remaining exercises of my past because we have been always connected with the university, studied here in London of course, so I had a certain interest in the university, we have no children, so you've got to think of something, so you think of abstract things and the university in fact, is an abstract thing.

INTERVIEWER

What do you mean by an abstract thing?

GENE

Well you speak about a corporate body - the state for instance and you visualise it as something as a living body having souls, the state says this, the state says that; the university says this, the university says that, in fact this is not true it is a completely abstract notion of the thing. The university as such does not exist it's only four walls. But for me and for some other people it is something a little bit more elevated, now I am for human progress and therefore, human

progress can be achieved only by knowing more than other people do, this is the whole key to the European progress because the people are always interested to do a little bit more than the others, well in other words it was competition between the different states you see; the one state produced for instance: Napoleon Bonaparte and another state had to produce the counter weight to it and that is you see, England and Prussia would beat in the end Bonaparte. So you can see what I was saying before, that private enterprise of an individual or the private enterprise of a nation is the same thing you don't win wars by spelling out peace in our time.

INTERVIEWER

I see. Do you still do any part-time tutoring a hobby?

GENE

Well I tried this, I had one or two private students that was nice

INTERVIEWER

For engineering or languages?

GENE

Engineering and that was nice because I knew the student came along and paid just a nominal sum but he paid because he wanted to be instructed, that means the man had a vested interest in knowledge so that was nice - he wanted to learn. On the other hand I am quite good at maths, and when I finished - forcibly finished teaching, at my college because I had reached the age limit, I offered my services to several schools, grammar and otherwise, just because I heard that physics - which is my proper branch and maths which is connected of course, with higher physics is in big demand, nobody ever wanted to hear of me, they had all sorts of excuses, so in the end I thought "well if they don't want to be taught no need, let them go". So private teaching like that is no good. Privately you can teach only people who have an interest in it and who pay for it - you services, if the people think that it is not worthwhile paying for the services well it's no good. This is why in all the schools which are asking for fees - you can call them public schools or anything else, people really learn because they are willing

to put money into something theoretical. Now if you get a service for nothing you don't appreciate it, and this is the case - this is the case with private education, I do not say private completely private because what they call public schools is not a private education, it is an education of a publicly inspired body where you pay because they've got to pay the teachers. Well I have been teaching for a very short time in a public schools just to bring up 'A' level people in languages, once in German and once in French and I can tell you those people were really interested because they paid for it.

INTERVIEWER

Have you thought about writing things for publication?

GENE

Publication, well in my time as a lecturer I published two books on the subject I was studying, I have written since then several other things but I never bothered really to go to a publisher, well I had a dog and I wrote a book about my dog

INTERVIEWER

The Greyhound

GENE

A very funny book

INTERVIEWER

Is this the Greyhound

GENE

Yes The Greyhound Bello, that means in Italian the beautiful and all German dogs are also called bello because it means barker hence we called him Mr Barker Beautiful or Mr Handsome Barker, and I wrote a funny book and the publisher said "well people don't want this, people don't want that" so it was never published, I still have it.

INTERVIEWER

That's a pity, I'm just going to turn over the tape now

GENE

I beg your pardon?

INTERVIEWER

I'm going to turn over the tape because we're running out of time on this side.

INTERVIEWER

Right tape one side two. Now a different topic altogether, have you got any advice for someone getting married?

GENE

Advice?

INTERVIEWER

Yes or a recipe for a happy marriage.

GENE

It is well, I feel that marriage is a very private matter, and marriage cannot simply be defined as living together, it is something more than that. You have to consider first of all the physical things and second, the educational, and third the background; when I mean physical it is probably for somebody who comes from a far away country - different as it used to be in England for instance: I welcome very much - marriage of the Prince of Wales with little Diana, the reason is that there is a difference of thirteen years, the Prince of Wales is thirteen years older, that means apart from the physical attraction because she is a very beautiful girl, and apart from the physical attraction because he is quite a handsome man the position was that he knew all about it, she knew probably nothing about it, and this is a very good combination, even if she knew something about it, well, he was so much older he could exercise, not only a friendly, but also in some way - a parental attitude, it's difficult to understand this sort of business for people who marry in a school or a college of the same age because they only see the physical part of it, but you see in this case there is another part and this is the bond between a younger person who seeks to attach herself to an older person because that man has got life already tried out, and the third thing is background, now I am harking back again to this marriage because it is nothing personal in it and you can see what I mean by background; Lady Diana was brought up in the neighbourhood of the court, her father was a court official there was nothing new for her in royalty, she doesn't need to show off that she is just as good as the others for the very simple reason - she was as good as the others. She comes

from an old family and you see that she has the title of a Lady only, this is only due to the English custom, on the continent for instance she would have been born as a Countess so and so, so you see it is this. Another thing is, there is no question of difficulty of religion, you see Prince Charles wanted, or at least the family wanted, or the state wanted to marry him with Astrid who is a Roman Catholic, now she didn't want to change her faith, she didn't emulate the french king who said "Paris is worth a Mass" - he was a Protestant who became a Catholic and she didn't want to become from a Catholic a Protestant, so you see that would have . . . even if she would have done so under protest a very big handicap for the future. The second thing is they had no common language, whereas here they have a common language, they have a common background, and with regard to education, well they are more or less on a similar level and this is a very important point, because sex is one of the most important things in life but it doesn't last for ever, there are other things to follow and for a pair to stick together at a later stage this is most important.

INTERVIEWER

Can you give instances of your own marriage?

GENE

Interested?

INTERVIEWER

Instances or examples from your own marriage because there is obviously an age difference between yourself and your wife isn't there.

GENE

Yes we have also a very great difference in age because of these very reasons I enumerate, you see we have also naturally the same sort of background, both of our parents were civil servants, we both were university graduates doctors of philosophy, we both grew up during the war and so we hated the fighting and saw what happened after the war, and therefore, we still stick together

INTERVIEWER

You would still advocate people getting married as opposed to just living together?

GENE

To just living together is really an impossible situation why do I say this? when people are young and the sex matters most it's quite alright, but when you get older you want to have security, now in this case neither the man nor the woman has security, the man loses somebody who looks after him because men cannot look after themselves it is a fact; and the woman loses the mainstay when this loose friendship breaks up for one reason or another. It is not for any political, religious or any other views that I don't think it is satisfactory, I think it is not satisfactory from the common point of view of stability.

INTERVIEWER

Stability. Would you then believe in the extended family?

GENE

To have family?

INTERVIEWER

Would you believe in the extended family

GENE

Extended family, what do you mean?

INTERVIEWER

Well that children don't just live with parents, but with grandparents and uncles and aunts in close proximity.

GENE

Well, you see the question of having a family and not having a family depends on three different things: first it depends quite vulgarly on cash, no need to be married, some women have children because they like children, they don't want even to marry the man, they've got enough money to carry on, so this is the question of the money. The second thing is that some people don't want to limit their freedom, children are a drawback like a dog, you can't go abroad while the child is here, but you do you can put the dog into a kennel, you can't put the child into a kennel, unless you have grandparents then you can do that, and the third is that people don't like

to have children, so they don't have any children, contrary to this, there are many people who love children, not only their own - they love children so they adopt a whole set of children - six, seven and they are very happy with them, well it's a question of saying "good luck to them" the other question is whether you want to do it.

'MY JOB'

INTERVIEWER

Yes. Can you outline, Gene what your job involved when you were in actual fact working?

GENE

What I was doing? Well I was senior lecturer at one of the colleges of polytechnic, and I was teaching electrical engineering on, shall we say, on a more scientific level, not how to connect little bits of wires, but why things are working and why things move. I like this business because I like to give younger people something to think of, more or less to hand down the culture which I inherited, so they can start there. You see, culture in a modern sense has got two aspects, the one is the physical, technical, scientific and the other is the world of the poetic and so forth, it is very seldom that people have mastered both aspects, the interesting part is that I have seen many engineers who have been dabbling in religion or in poetry and so forth, I never saw a B.A. graduate dabbling into science, and therefore, I felt that people should do this because the growth of science is only possible if the people, when they start studying, start on a higher level. When you start on the level which was five hundred years ago in maths, you can never reach in school, the level you have today, and therefore, as the studies go ahead in life, studies become more and more difficult, science and all that becomes more and more exclusive, people don't like it, but it is like that, and this is also the reason why it is necessary for the state to foster studies and to foster good schools. If you have been to a bad school you can never reach any heights whether you go to Oxford, Cambridge or London, what you reach later depends on what you have learned before.

INTERVIEWER

I see. Have you ever in actual fact taught languages at the college.

GENE

I beg your pardon?

INTERVIEWER

Did you ever teach languages in college?

GENE

No I didn't teach languages really, only in one public school for a very short time, actually it was 'A' level french, they wanted really a conversation of the pupils for a week, so that when it comes to the 'A' level exams they should be able to express themselves freely, they knew the french, but you see to read a language and to speak a language are two different things.

INTERVIEWER

Yes I know, yes.

GENE

And um . . . I . . . and this was really an eye opener to me to see how a public school works, and I found that they had a very high level and contrary to state schools, when I went there, the boss of the department, he was a colonel, and he spoke very very good french, so I thought well, how is that, and he said he was liason officer with the french forces during the war and so I asked him "well where is your french master now" and he said "well we have taken on a young Oxford graduate and we have sent him for a year to France on our own expense so that he should get there the proper fluency after he had graduated in french" so you see this is the difference and this is what you've got to pay when you go to public school.

TOPICS IN THE NEWS

INTERVIEWER

Reverting back to topics in the news, going back to topics in the news, how interested are you in topics in the news would you say you are very interested?

GENE

I am very interested, you see I have seen two wars, well for me these wars were really civil wars, so I termed them the first and the second civil war.

INTERVIEWER

How old were you at the first world war?

GENE

The first world war is the first civil war in Europe and the second world war is the second civil war in Europe

INTERVIEWER

Yes but how. . you are now what? 76 aren't you? so how old were you at world war one?

GENE

Now I am looking forward to the third civil war and so therefore, . .

INTERVIEWER

You predict another one do you?

GENE

Somehow, I don't hope, but it is easily possible, so I am very interested in the foreign news and to see how the politicians in all the countries of course, including England, think about these matters and all I can say, they have learned nothing, it is just the same people as it was, right, left, top and bottom, and they make the same mistakes as it was done before, and therefore, we are very likely to a fall in the same pit as before.

INTERVIEWER

How informed would you say you are about topics in the news?

GENE

Form?

INTERVIEWER

How informed?

GENE

How informed am I? Well, you see I travel quite a lot so in England I get a fairly good conservative paper which is the Daily Telegraph, and I was just in Germany, so I had a similar type of paper there. In the summer generally we are in France and I get the papers there. Apart from the facts, for instance last year, before last year I heard

President Mitterand speaking and also one of his present Ministers who was under. . well, Chairman of his party in Marseilles, so I am fairly well informed of what all these people do, and, of course, when I read a paper like for instance the Daily Telegraph which just brings the news without any comment then of course you can form your own um . . ideas and if you are intelligent enough you can read between the lines, and I think that the British government, the Russian government all make the same mistakes which they did before the war.

INTERVIEWER

Which is? or which are rather sorry.

GENE

Which is a very simple matter, here they don't want to arm, they are against armaments you see, they want to disarm unilaterally, well I, being here and have seen the thing, when Chamberlain came back peace in out times, Chamberlain and all the left-wing parties saying "we don't want to wage war, of course not, we have the whole empire why should we wage a war", but it didn't mean that the other parties didn't wage war because they had nothing, at least they said so, but they had one thing and this was the military power, and we are now exacting the same thing, we don't put up all our defences because it costs too much money, the opposition said. . encourages this and says" the Russians don't want war", well that's it, now I am just asking one question: would have the Americans dropped the atom bomb on the Japs if the Japs would have had the atom bomb, and this is the thing today, the Russians will gladly drop an atom bomb on anybody like they did in the Afghanistan similarly germ warfare and all that, which they don't dare to do here because there is some retaliation and this is the whole thing. Harking back again to my latin I can always say two thousand years ago there was a saying 'sic vis parchem par velum' If you want peace then prepare for war, and this is true today as it was two thousand years ago.

INTERVIEWER

Thanks very much then Gene.

T R A N S C R I P T 9Interview with James'POLAND'INTERVIEWER

James I'd like to ask you about your opinion about the situation in Poland.

JAMES

What aspect of the situation in Poland? - I'm not going to play any ball games but . . I suppose the truth of the matter is I . . .

INTERVIEWER

The Political situation which is being widely reported in the western press.

JAMES

I've only followed the situation in Poland through reading newspaper reports of the situation, you know sort of day to day basis and I must admit that I don't really fully understand or appreciate what is going on at the present time, so I suppose I've only got a very scanty knowledge of the history of Poland, the development, the social unrest in the early 60's, the late 1950's, um . . various sort of strikes that ensued after the late 60's early 70's, student unrest, trade unions etc., only really what has been written in the Guardian and The Times, I've not actually studied it as such, I've never actually visited the country so it's a little bit removed from me, but how I see the situation at the present time I suppose um . . one that's fairly tense with violent um . . and other students um . . staging a sit-in at the violent college to such an extent that they had to be removed by the military police or something like this.

INTERVIEWER

No I think there's a slight mistake there, they were removed by militia, who in Poland are just a civil police.

JAMES

Well militia, well yes it doesn't particularly matter but I knew that they were removed and um . . apart from that I just. . all I've heard is that there has been cries for food and people queuing for bread etc., etc., women having to leave their jobs in order to go and get supplies for the

family, so in actual fact I do find the situation in Poland removed from my own state of affairs, because I haven't been to the country I don't really appreciate what is going on at all.

VIOLENCE ON T.V.

INTERVIEWER

I see. To move on to the next question, what is your opinion concerning violence on television? that's violence in both documentary and news programmes and features um . . . plays, film, etc.,

DIGRESSION

JAMES

Actually you're going to rip through this interview fairly quickly if you don't pad it out a little bit more, because I think, with the Polish situation, I certainly went on to discuss the Polish Pope and various religious aspects.

INTERVIEWER

Yes. I um . . . I should have perhaps padded out that a bit more.

JAMES

Well it doesn't matter but we'll be through it in about fifteen minutes, do you see what I mean? you have to take it a little bit more slowly I think, which is a digression I know. Violence on television um . . . I suppose most people feel that violence on television programmes must be a contributory factor to violence in the home and violence on the street.

INTERVIEWER

Why do you feel this?

JAMES

But I didn't say this. . . You are asking another question which is not the object of the interview, you've got to say "yes" and I've got to go on.

INTERVIEWER

Right YES.

JAMES

I think there's too many interventions Jen, you see.

INTERVIEWER

In fact that's the first time I've intervened

JAMES

No it's the second one - about the military police, because the actual content of what somebody is saying, the accuracy of it doesn't matter.

INTERVIEWER

O.K. well, let's continue with . .

JAMES

Well I've just said "people would say that violence in television programmes must be a contributory factor to violence within families or vandalism etc., or is likely to be"- right, and then you started to say . . but that is not necessarily my opinion.

INTERVIEWER

Well what is your opinion?

JAMES

But I think you've got to let me expound more before you interrupt, because at the moment we are holding a normal conversation where I might say two sentences and then you say at least a hundred, and I never really finish what I'm saying because I'm thinking and I've found with doing the interviews that you've got to give people time to martial their own ideas together obviously to answer the question.

INTERVIEWER

All right go on.

JAMES

For example you know when I interviewed Ben he was very slow. Violence on television then. Well I don't particularly watch violent programmes if you like; if you're talking about such programmes as the Professionals or Kojak or Starsky & Hutch, um . . I don't particularly watch these sort of programmes which are quite violent in themselves, where very violent acts are committed among the police and criminals etc., etc., but I find the violence in these programmes a little bit false in so far as it's not particularly real, um . . I would say that the violence that is shown on the television in the newsreels at the time the riots were on in London in Streatham, Brixton area, and the Toxtieth area in Liverpool - I found those much more horrific, where the police were actually being harangued and stones were being thrown um . . I found that pretty awful probably because

Um . . the violence was pretty near to where I live, only about three miles down the road in the case of Brixton, so um . . in actual fact I don't think that um . . the violent acts if you like, or the violence as portrayed in television programmes such as the Professionals or Kojak would have much effect on children as such, or is not particularly a contributory factor to vandalism or violence today - violence in society. I think it's Just bought more to our notice than what it was before the advent of television and I don't particularly know of any research that would substantiate the argument that violence as shown on the media such as television, um . . contributes to violence in society.

INTERVIEWER

So you're saying that the violence was really there anyway and television has drawn our attention to it?

JAMES

Yes I think that people are inherently violent, or inately violent if you like and that it is only by the way they go um . . conduct themselves through their life shows or well whether their violence comes out or whether in actual fact it is repressed.

INTERVIEWER

I see, so you would hold that um . . television shows which show violence in fact are more true to life than the older type of television show with violence when bloodshed were deliberately excluded.

JAMES

Well I don't think violence and bloodshed's been deliberately excluded, it's always been implied but perhaps you haven't seen so much of the bloodshed before, you've seen a man stalking a woman along a street in such films as Jack The Ripper, the early sort of film on Jack the Ripper, you've heard a few shouts and then perhaps appreciated that the woman has been strangled or hit on the head but you haven't actually seen a violent act, but it's been implied, it's been there just the same.

INTERVIEWER

I SEE. What about boxing, karate and sports like that, fencing, do you see those as fringe violence?

JAMES

Not particularly, um . . . I mean within the sport of boxing, um . . . the type of boxing varies whether the boxer is a sort of welter weight or feather weight or in the heavy weight class and the lighter weights especially the A.B.A. folk only sort of ever box in three rounds, they tend to be trying to perfect their skills at boxing, various techniques of boxing, so I wouldn't say that's particularly violent, heavy weights are going for the K.O.'s all the time as well as using their own techniques and the things that they have become known for, for example: Henry Cooper's left hook - in the days of Henry Cooper, Cassius Clay's jumping around the ring - the fastest man on two feet, that was the gimmick that went along with that, I don't particularly see boxing as being violent.

INTERVIEWER

What about boxers like Marciano who had a reputation for slugging people and just standing there and being so thick if you like, that it was impossible to knock him down?

JAMES

In other words the other fellow becomes a punch-bag

INTERVIEWER

Becomes a punch-bag or ...

JAMES

Well to a certain extent Cassius Clay was in the same sort of class, or is it Mohamed Ali as he is now called, in so far as he literally slugged the other fellow.

INTERVIEWER

Yes but he had a degree of skill - I suppose Marciano was before your time, um . . . but he had absolutely no skill at all and his total asset was the inability of anybody to seriously hurt him, the fact that he seemed deprived of the normal sensory feelings in face and other parts of his body he could absorb an enormous amount of punishment and the result was that it simply became a case of Marciano standing there and hammering some poor devil into the canvas.

JAMES

I think that Henry Cooper certainly developed the skill of giving people quite a good left hook which was the technique that won quite a lot of his fights on, but I mean things like

wrestling I see as much, more violent in actual fact.

INTERVIEWER

This is wrestling as you see it on the television.

JAMES

On the television, I find wrestling rather grotesque and ugly to watch, but at the same time I appreciate there are various techniques and skills and movements involved that in actual fact um . . . the various blows are never delivered with a hundred per cent force so in actual fact the other fellow is spared perhaps a violent blow.

INTERVIEWER

So you don't hold to the people who say that professional wrestling, particularly that shown on television is a put up job? t at the contests are rigged before they go in the ring.

JAMES

I wouldn't say they are rigged, but they are following a specific rules of what blows at they can and can't deliver.

INTERVIEWER

Yes well this is true of boxing. The argument that is often put forward about professional wrestling is that they are in fact choreographed that the fight is rehearsed, even down to the final l moves because it becomes very obvious at some stages that. . . in fact it sometimes actually happens that two fighters will get out of phase and one fighter will stand there and wait for the other one to do something which makes no sense in tactical terms, it's obvious that he cannot put his next play into action until the other chap has done his thing and that suggests that they have arranged the sequence of play.

JAMES

I mean I've certainly seen um . . . a wrestling match where one fellow has just been about to stamp on the other fellow's hand in a certain way, with the back of his foot, but he has missed it by about, a sort of X degrees and you can see that that's been on purpose almost to do this. The very act of hitting or stamping on the other person's hand with your foot in a certain way would probably mean that it would have broken all the bones in his hand or something, so I think

they are obeying certain rules.

INTERVIEWER

Do you think that any of these sports are contributory to violence in the home? I mean you haven't mentioned for instance karate, what are your views on that?

JAMES

Well probably karate comes into a different sort of sport, or Kung Fu where there is lashing out and kicking which sort of came into its own when I was teaching in a school in London and it was an all boys school that I was teaching in at the time, and most of the boys like to try out these sort of kicking out acts during their break times, I mean obviously they got the idea from somewhere and I think possibly that was a television programmes with these things in.

INTERVIEWER

You're saying that television programmes actually help popularise things like karate and kung fu

JAMES

Yes but I wouldn't sort of um . . . they're not sort of what I call violence per se, they're sort of violent acts.

INTERVIEWER

How do you draw a distinction then, I'm not quite clear what you mean by the distinction between violence and violent acts.

JAMES

Well a violent act like kicking out at somebody in a sort of kung fu type action is mostly um . . . carried out by say teenage boys who are doing it to impress, which I gather they are, and is something new, or sort of a chop across the back of the neck etc., whereas violence I see as something which sort of drives a person to be um . . . aggressive all the time.

INTERVIEWER

You're saying that violence is a case of motivation, that a person has got to be motivated to actually hurt before he is really being violent.

JAMES

Yes. yes.

INTERVIEWER

I see. Do you think any of these sports contribute or T.V. or violence on television contributes to violence in the home?

JAMES

Well apart from sort of fringe violence which I'd sort of put kung fu with in that sort of category, um . . I wouldn't say that in actual fact they contribute very much at all because I mean boxing has been going on for a very long time now hasn't it? - a couple of centuries something like this may be more

INTERVIEWER

Getting on that way

JAMES

Certainly sports like fencing um . . I don't know whether that came from the original sort of tournament techniques in the mediaeval days of jousting with whatever the long spear shaped things

INTERVIEWER

No it came from duelling, fencing is a by-product of duelling as boxing is

JAMES

Yes. I see it much more... these sports as much more as skilful acts of manoeuvre than violent. . . acts of self-defence if you like.

INTERVIEWER

Yes. um . . .

JAMES

Well I mean duelling you wouldn't call an act of self-defence only in so far as . .

INTERVIEWER

You obviously don't carry a sword today but

JAMES

No but I suppose in actual fact you'd learn swordmanship to protect yourself, it was an act of self-defence if you look at it in those terms and certainly if you were summoned to a duel you would be all out to hit the other fellow before

he hit you and fatally wound him.

INTERVIEWER

It was really an accomplishment that was considered necessary for gentlemen at one time who carried a sword.

JAMES

Well it was some order of courage or gallantry wasn't it?

INTERVIEWER

Um. . yes that and it was partly the idea of all gentlemen should be ready to serve as officers in the King's army, sort of it was part of their social obligation to be trained at arms - fencing was that, um . .

JAMES

Yes but where the actual sort of jousting sort of originated from in sort of Elizabethan times I don't know.

INTERVIEWER

Well obviously all those things originated from military training um . . one thing from the joust the weighted, forget what they call it now I think it's called a mangonel have a weighted arm with a turnip hung one end to hit with a sword or a ring which you would have to put alarms through didn't disappear from use in the military until the end of the last century, because as long as men were armed with swords and lances it was necessary to train them to use them effectively and most of the jousting was simply military training exercises rather like now we have things like the Edinburgh Tattoo, very closely related - the same idea, or the Royal Tournament exactly the same idea, the idea that the military can train in public and make a display of it. . . . Now um . . .

JAMES

But I mean what I would like to say is that there has always been some sort of violence on the media and certainly in films in the form of cowboys and indians programmes,

INTERVIEWER

Yes violence has always played its part in films

JAMES

You know the bows and arrows, um . versus the pistols or whatever

BALLOONING/SOLAR
ENERGY

INTERVIEWER

Now to move onto another subject James, ballooning, recently somebody crossed the channel in a balloon heated by the sun a hot air balloon in which the heat was provided by the sun. Do you see ballooning as a future form of transport, do you think it has a future as transportation?

JAMES

UM. . . It depends on how crowded the air um . . air travel becomes in actual fact because I think ballooning has got quite a future, I think it was only on Tuesday or Wednesday that that fellow, another fellow in actual fact sort of flew a brilliant balloon quite local to here wasn't it? he flew on top, actually stood on the top, sponsored by somebody in the Lincolnshire sort of um . . is it spinning area or something like this in order to raise money for Stoke Mandeville Hospital, so people are sort of thinking in terms of ballooning as a leisure sport perhaps much more than they used to. As a form of transport in the future, I think it's um . . it needs much more precision, it needs to be much more precise than it is at the moment, I mean it would be no good sort of taking off in the middle of Hyde Park in London in order to balloon up here and to land in a field near the Open University in Milton Keynes simply because um . . my flight is not only dependant on um . . solar energy effecting the solar cells sewn into the skins of the balloons presumably, but also on the forces of the wind at that particular time and the climate and temperature, there are so many sort of uncontrolled variables, so I think it's got to be investigated much more fully than it is at the moment. I think at the moment people view ballooning as much more as a very nice pastime.

INTERVIEWER

Solar energy is being used much more than ever, a range of energy requirements for instance I went with you and we went to look at some houses in Milton Keynes which were using passive solar heating for their water supply, do you think that solar energy is a worthwhile line to develop and to follow?

JAMES

Not particularly in Great Britain simply because we don't have enough sun and I don't think that it can ever be cost effective, um . . . I personally wouldn't want to install any solar heating techniques or solar heating panels in any house that I owned because I think that we have too few months of the year, when in actual fact we get sun anyway, I think it would be different if you were living in Equador or California or somewhere where you get loads of sun, then the whole thing would be different, I think at the moment solar energy projects are very much in their early stages um . . . it's just a big experiment to see if it can be perhaps a supplementary form of heating in houses in Britain in case coal supplies diminish, oil becomes scarce or perhaps too expensive, gas and electricity prices sort of soar and people are looking for an alternative form of heating arrangement in their homes but for me I think the initial cost of installing solar energy equipment is, is, the initial outlay is quite a large amount and I just don't think that it can be cost effective given that we have perhaps three months in the year if you say June, July August in which we would get average or above average amount of sun, where the temperature is at least above sixty degrees F.

INTERVIEWER

So you would say that solar energy is not a viable thing in Britain. What about the building of it into houses when they are brand new um as . . .

JAMES

That's something different, yes that's something different I've only considered it with respect to um . . . an alteration to an existing property that one owned and that you would have various solar panels built into that structure, if for example I was having a house built and I had the choice of having it south facing etc., with solar heating panels built into the structure of that house, yes I think I would consider that as a supplementary form of heating, because obviously it wouldn't be putting me to any inconvenience to have the actual sort of heating panels installed.

INTERVIEWER

What about solar energy for other uses, do you see it as having other uses than heating?

JAMES

Well apart from sports like ballooning um . . no I mean I couldn't conceive for example: that um . . you could, or scientists could develop solar energy cells which could be placed in a car instead of using petrol, but I mean at the moment I can't think that would ever come about, but um . I suppose that is possible,

INTERVIEWER

Of course there is all ready one Japanese manufacturer who has a calculator on the market which is powered by light which most of the time means daylight, so what about applications in that sort of field for instance small radios, maybe portable T.V.'s these sort of things do you see them as having a possible market in that direction?

JAMES

I think that's possible I mean it depends on how much daylight they require, I mean you could, it could, that could go down to tape recorders and record players, stereos and even sort of small for sort of heating a room, maybe you can, one will be able to manufacture sort of solar energy cells which are the equivalent to light bulbs or something like that, um . . . but the question is you know how do you store solar energy?

INTERVIEWER

Yes well that's a very I suppose one would feed the resulting electrical energy into some forms of storage battery

JAMES

Yes I think that I'd consider the possibility of driving a small car like a Robin or something like that with three wheels on it, I can't see sort of um . . solar energy driving an E type Jag, but then I'm not a solar heating scientist so I'm not really very skilled to talk on the topic at all. I must admit I was um . . very interested in that solar project, or solar heating project up in Solar Court.

THIRD WORLDINTERVIEWER

To move onto another subject - the third world, how do you see the development of the so called third world countries over the next few years, say to the end of the century?

JAMES

I suppose it depends on what one means by the third world, that's always the first question I would ask myself, I tend to think it's all those countries which are not developed to such a level as Britain or America or other countries which are very refined and sophisticated in the way in which they live, but um . . . basically I suppose I would see the development of anything, or the development of the third world countries, the development of the situation in Poland, even the development of violence on television if you like, in terms of a dichotomy, as indeed I see most things in terms of the struggle between good and evil forces in the world, which is probably the model which I base everything on, for example: if one reverts back to Poland, I would see Poland as a struggle between good and evil, those who want to govern the country, the influence of catholicism etc., in fact we've now got a Polish Pope which I would probably call good forces, and evil forces which seek to pull it down um . . . it would be the same if I was to think about violence on television, I would see that as between good and evil forces, violent and non-violent acts. I see um . . . I don't exactly see solar heating and ballooning in quite the same way, because I think that's a totally different question, but with respect to development of the third world, I would see it in terms again, of a struggle between good and evil forces or powers which exist in the world as such, for example: um . . . a good way of looking at it would be . . . yes I see the development of the third world politically and economically, I see it in a way that I think relief organisation such as Oxfam and Tear Fund etc., should contribute clothing and food to under developed countries, should send people out to educate the people in under developed countries, contribute to their knowledge etc., show them how to farm,

show them how they can live in a better way, show how they can avoid starvation and teach them better forms of medical treatment and all the like, I see that as quite a good force. But on the other hand I think that's very threatening, it can be totally and utterly evil because people can be in it for their own ends and for what they can get out of it they might get little salary while they are doing it but they're getting a heck of a lot of status and they even sort of rip off some of the things which are taken out there anyway um . . . and even in so far as you're destroying the culture of folk who are living in third world countries, I mean it may not be necessary to develop them in the way that we in the west feel that they should be developed you know.

INTERVIEWER

Do you feel that organisations like Oxfam, Tear Fund and the refugee relief organisations tend to create dependency among the people, they create a class of people who are totally dependant on hand-outs from the rich countries.

JAMES

Yes but if you think in terms of Britain, we are not entirely rich are we, you see, I mean you know one side of the coin it's a sort of . . .

INTERVIEWER

Well even now we have something like ten times the average income of the world, so we are by no means poor, we're up among the top ten or fifteen richest countries in the world

JAMES

Well I don't particularly think that people in third world countries think that they are sort of getting hand-outs from people in the west, I don't think they probably view it like that at all, they probably think that we are just a load of idiots, I mean that's one way of looking at it, I think perhaps they appreciate um . . . being taught new ways of farming, new ways of caring for themselves um. . . prevention of disease etc., um . . . I think they can appreciate that because obviously they want to get the most out of their lives as possible, but I think there could be a certain amount of resentment in so far

as that we try to destroy their culture, the society in which they live and I don't really think that we have got any right to do that, I think what we have got to do is to make them aware that there are other ways of living and other ways of doing things and let them judge themselves which is best.

INTERVIEWER

I see, why I asked you that is because recently some of the Oxfam workers in the field have actually been talking about the people who's creation, about people who because there are no jobs for them and no land for them to farm live in a refugee camp and are totally dependant on whatever the refugee relief organisations can give them, and eventually what they are afraid of is that these people will not have the skills or even the initiative to go out and do anything for themselves so that they will become permanent refugees, permanent dependants on hand-outs rather than people who will be able to go out and develop their own world, do you think that we should. . . that they might put more emphasis on giving people skills and giving them tools to do jobs for themselves rather than relief like clothes and food and medical care?

JAMES

Well I think that one should sort of give them medical care, but, I don't think that they should become dependant on people in the west, I think that they've got to develop their own skills, which I think they are quite capable of doing, I think that up until fairly recently no body has actually gone out and shown them, I think they've actually got to be shown and I would see that as a sort of a good force if you like, to go out and show them how to do things, but um . . . but I don't think one's got to exert any pressure on them to actually change, um . . . I don't think they've sort of got to conform to the way that we go on in the west, that's one opinion; on the other hand I think in order that they can or shall prosper they've got to sort of advance a bit more than what they do at the moment um . . . but within what I've said I do feel that they do need to keep their, their tribal

ancestry in some places and the cultural background like we would particularly not like folk coming over here and destroying our heritage at all, we wouldn't appreciate that I'm sure, so I don't think that we've got any right to say that they haven't got to live in um . . in sort of tribes or communes because in actual fact they are quite happy and self-supporting, I think they've just got to be shown more skills, or to develop their own skills rather so that they can be much more supportive.

INTERVIEWER

I see, do you think that some of the skills that they should develop and some of the structures they should develop would differ radically from the west like for instance: the Tanzanians train people as medical orderleys with these little booklets of symptoms to go out and work in the villages because they can't afford enough doctors, do you think that sort of skills training makes more sense?

JAMES

Yes for me that makes much more sense actually than um . . I mean I think hospitals are obviously necessary in sort of very isolated areas but I don't sort of see development of the third world as building sort of massive and very expensive hospitals in the middle of nowhere for people to sort of travel probably two hundred or three hundred miles to. I think it's got to be much more on an individual and personal basis than that, and I think it's high time that we really got along side people in under developed countries and tried to understand them and not expect them to um . . always um . . be understanding of the way that we live, I think that they . . the people in under developed countries have obviously got to become more self-aware of what is going on in the world, but I think it's a case of getting along side of - as opposed to coercing.

INTERVIEWER

Do you think at the moment we are involved in coercing the third world?

JAMES

I think there's a certain amount of pressure put on them.

INTERVIEWER

Where do you think the pressure comes from?

JAMES

I'm . . I'm not actually too sure about where the pressure comes from , I mean probably through governments, politics probably plays quite a part, but probably relief organisations do pressurise.

INTERVIEWER

What about private industry involved in pressurising for its own purposes.

JAMES

Yes that's very likely, um . . it's one thing to show people how to drill for oil, it's another thing to completely sort of take over the whole oil supply after you've found it and not give them good money for it, in actual fact to discover it. In some cases it's just a straight case of exploitation

INTERVIEWER

Yes. well I'm going to turn the tape because we are in about five minutes from the end of the tape.

Right James, I'm going to ask you now about the hunger strike which recently ended in Ireland, the other day they held the inquest on them, I think it was nine of them or ten men who starved themselves to death. Now their object was to gain some sort of political status, did you agree with this or not?

JAMES

Well I saw the hunger strikers on hunger strike in the Maze prison in Belfast as people who were scapegoats and were being used by the I.R.A. in order to advance their cause. To me these . . the idea of striking and . . to the . . I mean going on to refuse food until you get to the point of death is absolutely horific, I just can't condone that at all and I'm . . to this day I really don't know quite what they have achieved um . . I think they've been given by the Irish authorities, or by the Irish prison authorities etc.,

INTERVIEWER

This is the Northern Irish?

JAMES

That's right; some concessions in so far as they can wear their

own clothes as only prisoners per se they have a bit more say in what is going on, but apart from that I don't think they've been granted political status at all, they were put in prison because they committed acts of terrorism, they had killed people, they set booby traps, they had shot people in cold blood, um . . so as far as I was concerned they should have been in prison anyway um . . really because they had committed violent acts and one can't get away from saying that that wasn't a violent act, but again in Ireland it's a struggle between good and evil forces um . . I don't know the history of Ireland so I can't elucidate at length on that other than so far as I see it as not only a political struggle but as a religious struggle as well.

INTERVIEWER

I see, you see the religious struggle as very important?

JAMES

Well coming from um . . one side of my family was catholic and the other side was sort of slightly protestant if you like, I appreciate the pressures that can be put on you um . to conform to catholicism, so I can, I appreciate the religious struggle on behalf of the catholics, and I also can see why the protestants take the stand that they do, um . . I've never fully read up about how the I.R.A. started or followed with interest about their manoeuvres, I've merely read in newspapers or listened to radio reports about various acts of terrorism that they have committed either in London or elsewhere, which obviously I found pretty horrific.

INTERVIEWER

I see. So you do you think they should have been given political status or . . .

JAMES

No I don't, I don't think that they have achieved political status have they?

INTERVIEWER

No they haven't

JAMES

I mean they're prisoners of conscience because obviously the sort of individual that joins the I.R.A. believes in its cause, and for an individual to actually sort of refuse food until they die, you've got to really want to fight for

that cause, I mean they were sort of martyrs um . . in the sense that sort of um . . people in the middle ages were burnt at the stake for what they believed, but I think that they were set up by the upper echelons of the I.R.A. to um . . to go on hunger strike and that's the way that I see it. I don't see for example that Szakaroff in Russia is going to achieve much at the moment by going on hunger strike in order to try and change the Russian authorities over granting or not granting a passport or visa for his daughter-in-law.

INTERVIEWER

I see. So you don't think that they were right to go on hunger strike?

JAMES

Well right in their eyes because obviously they were committed to the cause um . . I don't think it's right in so far as they committed suicide no. um . . I think that they caused a lot of suffering, probably a lot of mental suffering in their own families, but then, what I understand about people who are on hunger strike is that after say a week or X number of days then the person on hunger strike gets to a stage whereby they don't really care whether they live or not, there must be some deterioration in the brain cells and one doesn't have the desire to want food anyway, um . . so they're not really aware of what they are doing after a certain point in time, I mean basically it's sort of burning yourself to death internally, it's all the body acids sort of eating through the organs, and um . . I personally just couldn't condone that sort of action and I think that the British government were right in the approach that they took.

INTERVIEWER

So you don't think that they should have for instance force fed them or made them take food?

JAMES

Well it. . I don't know at what sort of stage you could force feed a prisoner without him knowing, how many days a prisoner would have to be on hunger strike before he wouldn't be aware that you were sort of force feeding him in any way.

INTERVIEWER

Well there are techniques for force feeding people even if they know basically putting tubes . . .

JAMES

Yes but I don't think you would have force fed them if they knew what is going on because they were committed to their cause, I think they would have to get to such a state of deterioration that they were not fully aware of what was going on before you could have actually force fed them, but at that particular point in time it may have been too late although some prisoners did in actual fact call off their hunger strike didn't they? because their relatives intervened and it became obvious to me that the particular prisoner had passed some point in his hunger strike that he would not be aware of um . . . life as we know it and so therefore, it was quite easy for the relatives to intervene and obviously they intervened on humanitarian grounds as well as religious grounds.

INTERVIEWER

I see. To go on to something else, have you any special hobbies that you indulge in apart from your work, is there anything that you especially enjoy doing apart from your work?

JAMES

Yes over the years I've developed a variety of hobbies which probably fall into three basic categories: the first set of hobbies I sort of took up in childhood and in my teenage days were those of stamp collecting and photography, stamp collecting because it was something nice as a child to have swaps of stamps at school and then to see that who've got most stamps of any particular country and later on I developed an interest in first day cover stamps which developed further into collecting crowns and other coins which are minted at the time that certain stamps are issued, so in actual fact they make quite a nice set.

INTERVIEWER

When you say crowns, you mean a special issue of coins

JAMES

That's right

INTERVIEWER

Minted specifically for a commemoration of something

JAMES

Obviously as a teenager I relied on other people buying these coins for me, I mean fairly recently the Isle of Mann have issued stamps and coins for the Duke of Edinburgh's award and then when Charles and Diana got married there were the crowns for those in various countries as I expect you know. Well that's a hobby which I still continue, but obviously I discriminate in which countries I am interested in and which issues of stamps that I will collect, it's mainly sort of first day covers issued in Great Britain although I am also interested in the Isle of Mann, but the Isle of Mann issues so many special stamps that you can't really keep up with that, um . . but fairly recently I am of the opinion that the post office are sort of making quite a racket out of this, it's becoming quite a racket, um . . and that I am really sort of stockpiling first day covers, because I am much more involved in research now that I don't really get time to look at them, so in one sense I'm sort of stockpiling up stamps that I'm not going to really look at until I retire, because that's going to be the stage that I'm going to get some time to look at them. With respect to photography, that's an ongoing sort of hobby, but again I've got less interested in that because that can become so expensive and so specialised.

INTERVIEWER

Do you have a camera at the moment?

JAMES

Yes I have one, I bought one about ten years ago which has got various lenses and filters which I can put on it which, . . I'm still quite interested in photography, but I find it too expensive and I just haven't got the sort of money to develop that any further, I mean other sort of hobbies in which I call my second category are hobbies that I sort of take up and put down depending on who I'm with, and where I am, for example: sailing, I did a lot of sailing in my teenage days simply because I lived in Kent near water and I used to go off quite a bit down to Broadstairs and later on to the Isle of Wight, so I got quite interested in um . . .

yachting associations and um . . coming to terms with sailing daily mirror dinghies and G.P.'s etc., G.P.¹⁴ and craft like Royal Darts, um . . and again being in the country I had the sort of pastime like horse riding, which again I haven't pursued much since I lived in London which is since I was eighteen, simply because if one goes riding in London you have to go to a riding school and be led around the paddock which is not very interesting and one can sort of go horse riding along Rotten Row but you've got to have all the gear, not just a hat but proper boots and jodhpurs and jackets and the like and again, I just don't find that very necessary really to enjoy that pastime. Since I've been at the O.U, I've enjoyed learning to play squash as I think you know, but again, I find that quite time consuming and I feel that in order to play a sport really well like that you've got to play at least two or three times a week, which at the moment is not possible, but I suppose the pastime which is my sort of third sort of category which I've always been interested in, is that of music and um . . as a young child I played the violin and my mother said that she couldn't stand it any longer, and so I dropped the violin and went on to learning the descant recorder, treble recorder, tenor recorder and bass, until in my teenage days I played in an orchestra and at one time I had to sort of make a decision between whether I was going to take up a career in music - playing a woodwind instrument, going on perhaps to learning the clarinet or flute, or develop my interest in science and biology which was my other sort of subject which I was quite good at at school, and I decided at that particular time that I would enjoy my music and that I wouldn't sort of work at it other than for exams and things, I would just enjoy it, and then of course I learnt to play the piano and unfortunately since I've been in London I have never had a piano in any place that I have lived in so I haven't been able to practice very much, um . . which means that I've not developed my piano playing to its greatest potential um . . but what I have done

over this last year and a little bit of last year, is started to learn the spanish guitar as again you know, not just playing folk guitar or just sort of ordinary strums, but learning finger picking and spanish guitar and I really enjoy that because I have to work out certain um . . combinations, chord combinations, plucking certain strings at the same time in order to get certain sounds and you have to work out um . . you have to sort of take a piece of music to pieces and work out how you're going to play it and how you're going to learn it in order to get the most out of that piece of music, and you can play it many times and on several different occasions and it can sound different according to the emphasis that you put on plucking a particular string, or strumming a particular string, so I find that quite exciting, which . . . and . . probably develops from my, initial interest in doing jigsaw puzzles which I still do because . . which is another pastime which I indulge in when I want to work out a problem for example um . . getting to grips with the content of the interviews, these interviews which I am involved in at the moment and analysing them with respect to whether they are cognitively complex or cognitively simple which is quite a dichotomy, when I was first confronted with the transcript of Mike , Hussey's interview I thought gosh I'm never going to get to grips with this, it's much too rich, I can't cope with it, it was much too rich and very dense and I read through it and I didn't know how to begin to analyse it, and so what I did, I flew to my old pastime and began doing a jigsaw puzzle (this might sound barmy) and I got out a thousand piece jigsaw puzzle, a puzzle which I'd never done before and through the way of piecing the pieces together and putting them in various categories um . . I worked out how I was going to analyse the interview, it might sound totally and utterly crazy but if I am faced with a problem which . . . in which I don't know quite how to proceed, I always fly to a jigsaw puzzle, and I might not finish the puzzle, but I stop

when I've got solutions to the problem, um . . other people might sort of paint a picture, but as I was never very good at art at school, um . . and I'm still not very good at art, I find it difficult to begin to paint a picture, I don't quite know where to start and so I'd be in more of a muddle and so I fly to the jigsaw puzzle and the puzzle in this particular case was of a couple of barges along the Thames by the Houses of Parliament and you've got Westminster bridge sort of in the middle of the puzzle with the Houses of Parliament in the background and quite a lot of sky which was very confused because it was very cloudy, but the foreground of the puzzle was very distinct, there were these two barges in the middle and they. . the bottom of the barges were blue and they had got various little what do you call them? life belts over the edge which were a kind of orange and they had got various canopies over the top and then to the side of this was the Embankment with the steps going up by sort of a monument and above that some trees which were coloured green and beyond that modern office blocks which were . . stood out fairly distinctly from the Houses of Parliament, which of course, was a totally different texture to these office blocks and of course, the actual arches of Westminster bridge were again. . there was different lighting effects in the puzzle, different textures which you could see, there was a big sort of rail along the top of Westminster bridge or I don't know what you call it - a parapet or something like this which had sort of different beading and um . . the foreground was quite distinct and as it sort of went into the background it was less distinct etc., etc., there was a red bus which was crossing along the top, and the colour which I immediately flew to to start the jigsaw puzzle was the blue of the barge because I like the blue, so I started with the blue of the barges and made those up first, went to orange and then went across to the canopies, but then the steps stood out - did the steps and proceeded up the side to the green of the trees because there was only one set of trees so that was easy, up through the modern office blocks and then across to the bridge

the arches of the bridge, the different textures, that was fairly easy to categorise and then down to the muddy water which was a bit more difficult and when I'd got to that stage of the problem I didn't have to go just by colour, I went by the shape of the pieces of the puzzle, so therefore, I was um . . . actually categorising my pieces again and it got down to smaller pieces and shapes etc., I just sort of filled in the water, went above did the Houses of Parliament, not only putting them into a group that said these are the Houses of Parliament and this is Big Ben, or the tower in which Big Ben is situated, but then I looked at the textures and at the shapes, by the time I had got to the sky I didn't need to proceed any more because I had worked. . . by working through the puzzle I had worked out how I was going to approach this whole problem of sifting through these interviews which is the approach which I have described to you here, so because I haven't got anybody to talk to in London, simply because I live on my own and I haven't got anybody to talk to or share my research with, I would tend to try and think out, or think through the problem, not by sitting and biting my nails, or walking up and down with a cup of coffee, I tend to work through it with a puzzle, or take up my guitar and work through a piece of music in a combination of strengths.

INTERVIEWER

I see. So you see your hobbies as . . . or your pastimes as being related to your work in that they help you solve the problems which are involved in your work.

JAMES

Yes. A better hobby would have been to have gone back to playing chess and developed techniques of playing chess and the various moves, but I had found in my early twenties that playing chess with folk really took me over, I got consumed by my desire to play chess, that I couldn't put it down even to go to the loo, or to eat, that I had got to work through the chess problem at all costs, and I just found that very very bad and therefore, I just can't. . . I just don't

play chess at all now. Whereas with a puzzle I can actually predict how long it is going to take to finish a certain part of that puzzle within a few minutes.

INTERVIEWER

I see. Um. . to move on to another subject, if somebody else was getting married would you think there was any advice that you ought to give them, say a friend or relative was getting married what advice would you give them?

JAMES

Um . . well I suppose I would. . I instantly think of my parents marriage which was a complete and utter disaster, and say Look before you leap, that's one part of me would say that, but that's a little bit tongue in cheek because their marriage was absolutely disastrous and had . . I led a very unhappy childhood and obviously until fairly recently have been unhappy through most of my life simply because um . . the effects of their rotten marriage have rubbed off on me as the only child of that marriage. I don't think I would have a shopping list of things to look out for in a particular person, I think probably the main thing is that one should feel at ease with the person you're with and there're not too many things about that person that you dislike for example: if you feel on edge about the way somebody sits or a particular mannerism of a particular person, or the way he cleans his toothbrush or the way he gets dressed etc., what he does or doesn't do at breakfast, if you're on edge before you're married I think it's going to be far worse afterwards, I think that one has to look at the overall situation, not particularly see what is in it for yourself, but to see if you could sort of rub along and get along with a particular person in all aspects of their life and what they are interested in and be prepared to um . . support them in their career or their interests, I mean um . . so seeing it from a man's point of view quite a lot of my friends are married obviously by thirty-five um . . they get along quite well with their wives until he wants to watch match of the day and it's all "bloody football I can't stand it" you see,

Now I don't particularly like football um . . . not because I don't enjoy football as a sport, I just can't get the singing, the crowds chanting and singing and messing about and the hugging and kissing that goes on when a goal is scored, I used to enjoy football, but I think this is the great grind about whether you're going to have match of the day on, or how you are going to spend your evenings, then it doesn't make for sort of harmony, but on the other hand I wouldn't say that you've got to be sort of passive in this situation and totally agree about everything, I think you've got to have your own opinions, I think probably the most important point that I would make is that I do believe that the man should wear the trousers believe it or not (laughter)

INTERVIEWER

You're not in favour of women's lib then.

JAMES

No I'm not a women's libber by any stretch of the imagination, I think you probably know that, and um . . . I think that the man is master in his won house and if it came to the ultimate decision that his decision would be the one that would sort of stand. But after some discussion and that maybe the man should sort of compromise in some situations but I think nothing is worse than a domineering wife.

INTERVIEWER

Do you approve of the idea then of living together before getting married to get to know somebody?

JAMES

I think it's quite a good idea yes, I don't see any reason why one shouldn't live with one's boyfriend or girlfriend whatever the case may be.

INTERVIEWER

You would live with a girlfriend if you

JAMES

I personally wouldn't no, though I have lived with a girlfriend yes at one stage in my life for a year or so and then I was going to get married to her and unfortunately she died, that was some time ago, I learned a heck of a lot

by living with Sarah at this particular time um . . I learned you know, I think that the first thing I learned was that I couldn't always get my own way that really I was quite selfish, particularly because living on your own you do tend to think of yourself and nobody else, whereas if you are living with somebody there is somebody else to consider, but I wouldn't advocate living together if one was keen on having a family, I think there needs to be something a little bit more permanent than just a living together arrangement.

INTERVIEWER

This is because it's needed for the benefit of the children.

JAMES

I think the children need some sort of stability, I wouldn't say that living together and not having a marriage contract and having children, I wouldn't say that that wouldn't work, I think that it could work given that you have a number of people who want to live together all living together in a commune and that they raise children in a commune structure and everybody becomes responsible for the upbringing of the children in that structure, I think that could work well in actual fact, I think given that the people who are living in that commune are totally and utterly committed to that way of life and that you've got to view it as a commitment say for maybe anything up to fifteen years, certainly if you are having a child or children in that sort of structure, because I think you've got to sort of get them past about say sixteen, past that sort of hump when they can go out and fend for themselves. Um . . I don't see any reason why that shouldn't work, there again there is some sort of commitment although it's not a contract initially, um . . I personally wouldn't enter into that arrangement, um . . probably because part of me is still a bit catholic (laughter) and therefore, that's why I say that I see the man as head of the house, but even in a commune a man could sort of be head of the commune, but that doesn't mean to say that the woman is um . . is purely submissive.

INTERVIEWER

But surely that would be more than one man and more than one woman, so that there would be a more democratic structure.

JAMES

That's right yes.

INTERVIEWER

You're in favour of marriage as an institution?

JAMES

Yes I am. um . . . I think there are problems if one is not married in later life.

INTERVIEWER

In what sort of way?

JAMES

There are even problems now say at my age in their thirties for example: I go home to nobody um . . . there are problems of loneliness and isolation and getting um . . . and being quite selfish and only considering yourself and nobody else. um . . . and it is totally abnormal I think to live on your own um . . . I think you can get very phobic about certain things unless you sort of mix in company daily I think that you can see life in a very distorted way.

INTERVIEWER

I see. So you are infavour of marriage for the majority of people

JAMES

Yes, yes.

INTERVIEWER

How would you feel about those people like Lauri Smith one of the people you have interviewed or say a catholic priest who for vocational reasons chooses not to be married

JAMES

That's not quite true, Lauri Smith in actual fact lives with a woman, I mean . . .

INTERVIEWER

I don't know him I'm only going by what you've said.

JAMES

No in actual fact he does, Lauri Smith's about 54 and the woman he lives with is about 68, I mean and she's not his

housekeeper, they in actual fact live together, but he was ducking the whole question of marriage in that particular interview, but Lauri Smith needs Alice in order to develop his career, he couldn't develop his leather work industry or his leather work craft if you like, without Alice behind him, because she is his inspiration, she's his encouragement and that is the thing which one lacks if one isn't married or living with someone else, one isn't encouraged or inspired to do very much unless there's someone outside who you see fairly regularly, hence: I find it helpful to come up to the O.U. to say for example you or or somebody else to talk to, to be encouraged, otherwise you begin to wonder at times why you are doing something.

- But

INTERVIEWER

You don't think you would wonder in quite the same way if you were married?

JAMES

Well You would obviously go home and they would say well you know "how did you get on with your research today dear" and you might say "bloody awful" but you've shared it. Whereas I can go home and I can't kick the cat because we are not allowed cats in a council flat, there's not very much that I can do really, I mean I could have a few bottles of brandy and swig away you know a few beers and be a quiet alcoholic

INTERVIEWER

That's not very advisable is it

JAMES

But that is why people sort of take to drinking, in other words there is a lot of sort of feelings are repressed and perhaps. . suppose for example something has gone wrong in my research which I might have let off steam to you two a little bit but I've still gone home thinking "I'm never going to do this, I'm never going to get my Ph.D" now if there is nobody at home to let off steam to um . . in actual fact the first person I might meet the next day might be the postman and he might get the full force of my aggression because I'm wound up from the day before, in actual fact my

postman doesn't he's very nice, it would be more likely to be somebody who has pinched my parking space at the flat, you know, and I might say "well you know I'm here" and all the rest of it, or um . . . somebody in a shop who knocks into me with a trolley or something like that and all sorts of other ways. Not that I'm . . . I mean I hope I'm not an aggressive person, but what I'm saying is, obviously it's repressed whereas if you went home and discussed it with somebody I think it would obviously dissipate.

'MY JOB'

INTERVIEWER

Now to turn to one more thing, what do you see as your job? How do you feel about it?

JAMES

Well at the moment my job at the Open University as a research student um . . . researching into the area of cognitive complexity is really just a continuation of my hobby, but um . . . trying to solve the problems of how people think and in trying to solve the problem of how people think, I'm obviously trying to solve the problem of how I think in actual fact myself. So that is why I I fly to doing a jigsaw puzzle now and again in order to try and think logically through this procedure. I'm very interested in how people communicate with other people, and how in actual fact they formulate opinions and ideas and models about the world, and it intrigues me and I still don't quite know how they do it. I've called this im . . . process of how people think, cognitive complexity which I don't particularly think is a good term, it may well be cognitive simplicity or cognitive naivety are better terms, but I think most people and I say that with tongue in cheek a bit because I can't sort of say fifty per cent of the population, say the majority of the people um . . . think in a totally confused manner about all sorts of things and on all sorts of topics. I think very very few people have any clear um . . . thought patterns about any particular topic.

INTERVIEWER

And you're hoping to find some way of categorising people's thought patterns?

JAMES

That's right, I think it's easier not to speak about how you think about things, I mean people don't like thinking, it's hard and it's difficult and um . . . it's easier to muddle through life and blame everybody else you see, it's the councils' fault; it's the government's fault; um . . . if you go and buy a house and you picked up the first surveyor etc., to survey it and he doesn't make a good job, of course it's the surveyor's fault that it, you know, the house has got sinking foundations or something, whereas if you had done a survey of surveyors in that particular region, what their qualifications were and their reputation etc., you might have landed a good one if you had thought about it. But the process of thinking through the problems and situation and whether they have got any general model that they can apply to any situation, or whether they have got to always read up about it, for example: always read . . . to have read the history of Poland before they can answer a question of Poland; to watch a lot of violence on television before they can formulate an opinion about whether programmes on television contain violence.

INTERVIEWER

I think, I think in some cases obviously you have got to do that, it's a matter of how good your knowledge is, it's no good me saying "I think there's too much violence on television" unless I've actually watched television, It may well be that there's no violence at all on television, if I've never watched it I don't know, I'll only have a second hand opinion

JAMES

No I think it's the way you set out Jen, I mean if you set out to analyse a television programme, if you just watch sort of any programme in a willy nilly way and then somebody says um . . . asks you about television and you say well of course, you've watched television every night so you must have watched the Professionals and you must have watched Starsky & Hutch

etc, at some time but you've never really thought about it, I mean that's one way of setting out and that I would say is a very muddled way of proceeding, but if you actually sort of sit down and think now I'm just wondering whether television programmes are in fact violent, I'll watch the Professionals tonights and I'll particularly you know, I'll look at everything that goes on, each shot and then perhaps watch it the week after and say compare it with Starsky & Hutch or something, you're adopting a different procedure, you're adopting sort of different thought processes altogether because. . and again it's not only with respect to violence on television, it's the way people in actual fact communicate with one another um . . some people are very clear in the way in which they think um . . others are much more confused, it's sort of implied - you've got to read between the lines, so it's. . um . . I wouldn't say that. . I think it's something clarity of thought is something which one can develop over the years.

INTERVIEWER

I think you've got to be careful with communication because communication can be abbreviated by people because of for instance a shared perspective, take an example from my own life, my wife will say something like "oh I want to go to London this weekend" it would never occur to me that she would want to go anywhere other than her mother's house in North London, I assume if we are going to London we are going to see my mother in law, because if she was going somewhere else, if for instance she wanted to go to a cinema in London or a theatre in London she would say very specifically "I want to go and see such and such in London" rather than "I just want to go to London" London is a vague definition because I know there is a particular place in London of particular interest to her, that's a shared thing, I mean it's confusing to outsiders because it seems you know where do we want to go, but it's not confusing to either of us because we are both perfectly well aware that London means my mother-in-law's house from our point of view, and this sort of shared perspective

lies behind a lot of truncated communication.

JAMES

Yes. Well that would apply also in a work situation

INTERVIEWER

Oh yes it does, I mean people. . there are understandings about what people are going to do.

JAMES

I mean for example you said this morning "I'm going over to buy a newspaper" you didn't state that you were going over to um . . what is it the farmers or whatever

INTERVIEWER

Actually I went to the shop.

JAMES

Or the shop, but I knew that you were going somewhere on the campus for it, either the bar near the refectory, the farmers' den or the farmers pantry or whatever,

INTERVIEWER

The beverage bar

JAMES

The beverage bar, or you were going to the shop, when you said "I am going to buy a paper" I didn't think for one moment that you were going to the city centre. But you did state that you would be back in five minutes, which by definition would mean that you weren't going to the city centre because you couldn't get up there and back in five minutes. So in that respect there was some sort of shared perspective.

INTERVIEWER

It's um . . people have shared perspective about what they mean, by particular quite short sentences and these are very often quite private, so to overhear the conversation of two people who know each other is often to hear what sounds like muddled and confused thinking, whereas in fact they don't have to say a lot because having said quite a short sentence they know that they have directed the other person's attention to a whole range of implied meanings because they share these implied meanings, they are conscious of sharing them there is no need for them to add the great mass of . . .

JAMES

I think here also we are going into the realms of different sorts of communication and different sorts of conversation and obviously I'M particualrly interested in the sort of informal sort of informal conversation which one might have in a coffee bar of the Open University, but unfortunately I can't sit in the coffee bar of the Open University with my tape recorder and tape these informal conversations which I might have with you and somebody else etc., etc..., simply because I'm not going to make a very good recording so to a certain extent um . . any of the interviews which I conduct have got to be in a fairly formal setting, um . . when I am going to say to you "well look I'm interested in what people think and I'm going to have a conversation with you on eight topics"

INTERVIEWER

Yes it's um . .

JAMES

It's unfortunate but it's the only way of um . . getting um . . a conversation and taping it um . . a conversation which is sort of structured in some way if you know what I mean, so that you can look at their thought processes, otherwise you're going to get bits of different conversation

INTERVIEWER

Yes I think we had better draw the interview to a close now James because

JAMES

Yes there was only two other things which you were supposed to ask me which was how interested am I in topics in the news?

INTERVIEWER

Yes well I'll ask you that now before we run out of tape

JAMES

O.K. and how informed I am.

INTERVIEWER

O.K. then how interested and how informed are you?

JAMES

Well basically I'm very interested in topics in the news but,

I don't have time to follow the news very much on the television or the radio, or read the newspapers, I read the Sunday Observer and the Guardian on a Tuesday and Thursday and that's about it. But I wouldn't say that . . . I would say that I'm quite interested, but, on the other hand I'm not particularly well informed.

INTERVIEWER

I see, this is partly because your research work takes up so much of your time.

JAMES

My research work takes up all of my time, and I don't have the time and at the moment I don't see it as a necessity to be that wellinformed about items in the news, apart from jobs which are going in universities or polys O.K.

INTERVIEWER

O.K. thank you.

TRANSCRIPT 10Interview with JohnLANDINTERVIEWER

Right John what are your views on the situation in Poland at the moment?

HN

(long pause) My main problem in answering that question is in deciding whether to answer it, in other words, normally speaking I don't go around giving people my opinions on situations anywhere, and of course, normally people do not ask what my opinion is of a situation so um.. just treating this as a sort of naturalistic encounter, I don't immediately have a view which I would give independent of asking for instance, why are you asking me that question? and making all sorts of attributions about who you are if I didn't know you were interviewing me for a specific purpose, I would have had some background information about you before you asked that, and therefore, tailored my reply according to those perceptions.

INTERVIEWER

Yes.

IN

So the important point I think as far as responding to a question is who is asking it and why, and um.. I don't see myself thinking about an issue like that independent of that sort of perception. So um.. I would have to categorise you in some way before I was able to respond to that question..

INTERVIEWER

Can you categorise me right now?

N

No what I'm thinking of is that you have obviously asked that question which is a political question of contemporary significance to elicit some sort of idea about um.. my position on some sort of spectrum politically perhaps um.. perhaps also on terms of awareness and interest in current events that's reported in the media. I think on most issues of that sort I would have a fairly complex view, which is not the sort of view which one would report in everyday conversation, in other words, in a brief encounter in a pub when someone says "what do

you think about the situation in Poland" I would say something like "it's pretty difficult, looks a bit um.. edgy at the moment as far as the Poles themselves are concerned, it poses all sorts of threats to world peace" and generally speaking go on at a sort of neutral, uncommitted level, as normal conversation does go on. The um.. conversation only becomes significant as distinct from merely being conversation as one pursues the hidden beliefs and values of the participants, and normally speaking I wouldn't be interested in pursuing differences in value in such conversations, about the rights and wrongs of trade unions versus governments, be they Communist or capitalist. umm.. about human rights or whatever. um.. I might be more interested in conversing about the beliefs aspect, you know, what are the chances of particular things happening in the future based on some model of behaviour by the relevant parties, the Russians or the Solidarity people as an aspect of people's behaviour generally. So that I would make a fairly firm distinction between the belief side of issues facts in one sense - but I realise that the facts are only facts within a particular way of viewing the world, but not about the value side of it much, because I'm only interested in pursuing differences in values between myself and other people, with people I intend to have a much closer relationship with, than one has in the course of a normal encounter. So um.. I need prompting now.

VIEWER

You need a prompt? Do you know any Polish people - have you got sort of first hand information about the situation?

No, no first hand information.. whatsoever.

VIEWER

You don't actually know any Polish people in England?

As far as I know, I don't **no**. I have met Polish people in the past obviously, but in the long past, I know several people, and some very well, from Eastern Europe but not Poland in particular, so I have fair appreciation of what living in an Eastern European situation is like.

Violence on TelevisionINTERVIEWER

Yes. Right um have you got any views about violence on television?

HN

Yes again I have to deconstruct the question. I think naturally as an intellectual, I um.. if I am taking that question seriously rather than as one which is part of a social encounter, I have to be constructive to my terminology which broadly speaking says that it is misleading to talk of a thing such as views because they do partition to beliefs on the one hand, and values on the other. In other words assessments of a cause or character between particular images and particular behaviour for instance, and on the other hand the different values which is possible to place on the different behaviours which produce perhaps, in other words some people may say that um.. violence on the football field causes with certainty or with a specific probability, violence on the terraces or the surrounding streets afterwards. um.. and that's quite distinct from the value or disvalue you place on the behaviour which you observe off the street, so this failure to disentangle the beliefs and value aspects as a fatal flaw of most discussions. So as on most things I would never or probably never sign a zero probability to there being some cause or connection between the appearance of certain sorts of images on television and certain sorts of behaviour only a fool says there is no connection, only a fool suggests that there is a deterministic connection of the sort which opponents of Mrs Whitehouse um put forward. So there is some probability between nought and a hundred that particular images cause particular behaviour and unfortunately we also have to confront the fact that even if you establish that that probability was fifty seven per cent it doesn't have any significance until you have evaluated that behaviour in terms of some moral or other normative scale. So that my views are de-complex and pluralistic in the sense that I believe that there are a wide variety of tenable probabilities i.e. that the evidence is not convincing one way or the other and perhaps never can be, and pluralistic in the sense that I believe people are entitled to their own evaluation of this within pretty broad limits.

INTERVIEWER

Would you see sports such as judo and boxing as fringe violence?

HN

I'm just trying to capture the thoughts that are racing through my head and concepts such as intentionality come into it, as well as defining violence and I suspect that I'm trying to think whether violence doesn't have an intentionality component to it in..... I don't see boxing or judo as anything but boxing or judo really, I have my own conceptions of them but I don't think that I translate them in the way that you're suggesting. In other words it doesn't map onto some other thing they are just what they are. They could have obviously violent connotations but they sort of.. I'm not sure what the grammatical term is, but you're wanting to imply that they are something else, in that case....

INTERVIEWER

Could you say that, or would you say that they are violent acts?

N

That's for being more.... it's more clearer that you are asking about the meaning of the term violence rather than anything else and um.. therefore, to me if you're asking about intentionality um.. when I smack my child, if I do, whether I am engaging in a violent act will to me depend on the intention behind the act. So that a boxer who has engaged within certain rules and norms, in boxing hits his opponent, it would depend ultimately I would think on his intention, whether I would like to call it a violent act if he was um.. not motivated by malice, hatred and a specific wish to do harm for its own sake as distinct from to win the contest, then I don't think I would like to call it violence.

INTERVIEWER

Would you say things like the Professionals or Kojak on television which are fairly violent in themselves aid violence in families? Especially if children of a particular family watch these programmes.

That's a complex question and a bit loaded I think. um.. as I said before I think all these assessments of effect must

essentially be probabalistic and what I don't want to give you is, any suggestion that if I said "yes I do think there is some influence of a cause or character" that is of any significance compared with the difference between saying that the influences thirteen per cent or fifty three percent or ninety seven per cent because the problem with talking about these things is that if you say there's a connection a causation lying from one thing to another, the diacotinous sort of binary way normal people, normal conversation, normal modes of thought, normal constructs ah forces, leads people to interpretudus, to be saying a hundred percent, so of course, I would say "yes" depending on the child and the background, the reception of an image from the screen may shift the probability of him going out and committing a particular act from N to N plus one or N plus ten per cent um.. being a much more important fact is what is he and whether N plus ten is at all significant and imminent. If we decided it was significant there are many more important questions to be answered before we take any action in relation to that particular image. For example: what other images he would be getting and how do we go about evaluating the behaviour. It's typical to take the easy cases of the violence on the screen with the violence on the streets but, if you are to take action on the basis of some cause or connection then I think that you are committed to scaling all sorts of behaviours on some sort of moral scale, social utility scale and doing it systematically and the people who wish to do it, on the basis of one fairly restricted and "easy" in quotes case i.e. people being bashed up on the screen going out mugging, haven't really addressed the issue, I'm just getting a slight suspicion this is really about my attitude to violence rather than my thinking so you had better prompt me again.

LOONING/SOLAR ENERGY

ERVIEWER

Not necessarily actually, I mean I'm more interested in the content of what you're saying, not in any particular attitude at all. Right, a few weekends ago, in fact I think it was at the end of August a fellow crossed the channel using a balloon and solar energy as the power force, ballooning is becoming more and more popular do you see it as a potential form of travel in the future?

IN

Well literally obviously it would be silly to disagree, some people will obviously travel in balloons, I would think, in the future, if you mean um.. that it will become somewhat more significant in terms of almost a public transport system, I don't know whether I have enough knowledge to make any sort of assessment about that, my naive intuitions are that the technology is probably inadequate to carry many people at any great speed and therefore, one's assessments really come down to thinking whether people are going to be happy to drift around at a fairly slow rate and low numbers, rather than get from A to B fairly quickly. I suppose I see it as expanding, more people doing what they are doing now in balloons, but not really as a mode of travel.

INTERVIEWER

Yes the fellow used a special type of balloon, I think it was double skinned and obviously solar energy played quite a big part. I think there were little solar cells sewn into the skin at some point. um.. Are you interested in solar energy in the form of solar heating as an alternative form of technology.

N

Well, what are my attitudes to energy conservation, alternative technology, economic growth, um.. what sort of economy do I want to see, you're asking me about my values there, but I don't think again I can answer without insisting on the importance of beliefs as well as distinct from values, about what is going to happen within particular arrangements um.. and what sort of time horizon one takes. I'm not terribly... I think I am actually, I am very conscious of time possibilities and I suppose if I had an attitude to ego nuts, it is they don't have much sense of time and that most differences and most conflicts over a lot of these energy issues are differences in the time perception rather than ultimate values, I think most people as being in are in favour of energy conservation, not exploiting natural sources, not digging up nice country side or not having nuclear power plants

if it is possible to get energy efficiently in other ways etc., but, unless one specifies very clearly what sort of time one is willing to take, and what sort of trade off one is willing to make with other things, the discussion doesn't get very far, merely by saying "yes I'm in favour of that or, I'm against the other thing". As before it is up to each individual to, in my view to make their assessment of these things, both on the probability side and the utility side. It's the task of a political process to bring those different beliefs and values together and produce an answer. Not committed to saying that the political processes currently it operates is designed to do so, or does it in a fair way. That's what it ought to do.

THIRD WORLD

VIEWER

Right, you're not going to like the next question probably because it's going to ask for attitudes again. I'm going to ask you, have you got any views about the development of the third world, politically and economically?

Yes well I don't mind answering, but as you would expect it's the same sort of answer. I think ... it's you know... apart from time passing in the bar or at conferences to the converted which I'm all in favour of as a sort of social activity. Asking for people's views about things is the most misleading or unhelpful thing one could possibly ask about, I mean I never ask for anybody's views myself because I'm basically not interested in their views - I don't think. Any more than I would expect them to be interested in my views. If we are going to engage in more than sort of chit chat or party politics party politicking in order to pursue power and if you want to get power that's fine um..and you use all means, like um gathering together people who say they have the same views as you have. Unless you're doing that then views on any particular thing are not of great interest because they will only be a pale reflection of much deeper values and beliefs and that is the thing which is interesting to talk about I think. So I will be happy to start off with talking about the third world but as a means only of coming down to the underlying assumptions on moral or

ethical sort on the one hand and the beliefs about causation and the natural human on the other. For instance, about earthquakes - disaster relief in the third world, that sort of question is extremely interesting because it does raise all the issues about the relationship between man, his his environment um.. what are the cause or processes and connections. In other words I am only interested in talking about the fundamentals and any,... anything else, anything other than that is sort of phenomena of social chit chat.

HUNGER STRIKERS

INTERVIEWER

Right fairly recently, I think it was over the weekend, um.. a hunger strike came to an end in the Maize prison, up until the time that it was called off, would you have said that these prisoners should have been given political status?

IN

Well I'm clearly not going to answer that question. You'll expect from what I've said before, um... I would answer it only indirectly in terms of what I... what I think the government ought to have done, given my interpretation of what they are seeking. That to me consists of my putting myself in the government's shoes, assessing the different-um.. outcomes they're seeking in terms of what is likely to happen if they do this or don't do that, what are the political consequences and in a word seeking what was the rational strategy for them. In other words I suppose you know.. it is quite interesting why I don't offer an answer - is that I think I don't offer an answer except in a decision situation in other words, I have a lot of... on a lot of these issues I have a vast amount, far too much actually, information floating around in my mind um.. but it's never... it takes I think a probabilistic form, even on the value side, you know, I may... I'm not certain about my preferences or my values always so until I would actually have to take a decision which is of real consequence to me I don't necessarily have a position and um.. I only realised what my position was after - having being committed to it by a decision and the decision would be I suppose, to be put on the spot about what my view is and in circumstances

other than this sort of one, I may not be able to um.. be as evasive as I am here, although this would be my better, more correct report and if I was suddenly confronted on television with a necessity to give an answer to that particular question.

INTERVIEWER

Of course on television, you could always say you are not going to comment on the matter.

N

Yes but then I have to sum up the cost to myself of appearing that way on television because the power of the medium is immense - to portray that sort of answer in a negative way, in fact, the large amount of the problems in all the media and much much much more concern to me than the effects through violence, I suspect are this ability to portray people who are uncertain about things in a positive way. The politician who comes over is always the person who is dogmatic, authoritarian about his beliefs, about what is going to happen tomorrow, next week, next year and is quite adamant about what is quite proper and good and so on. The person who doesn't know, is uncertain gets a very bad press. The person who is honest in other words.

BIES

INTERVIEWER

Right. Have you got any hobbies John, or pastimes which really turn you on, which you indulge in perhaps outside of the university work?

I

Interests I suppose you mean,

INTERVIEWER

Yes if you like.

There is a classification problem here because I don't think I want to see, or fortunately compared with most of the population have to see, my work and my leisure as separated things. I've been able to merge the two fairly effectively to be satisfied even though it has its costs. One example would be um.. my interest in sport I suppose, where I have been able um both watch and pursue it as an interest and make it a part of the study with which I am involved and broadly speaking I think my aim has been slightly consciously to abolish the

distinction and not have to seek some sort of outward outward compliment, compensation balance in interests or hobbies or some sort of thing which is not um.. satisfied at work. Not sure that I can really go much beyond that. In other words turning on can happen in all sorts of ways. and.. I think this is likely to happen in what you might call is my work situation as what you might call my hobbies or non-work situation. The fact that I am sitting in the Festival Hall listening to a concert doesn't mean I haven't been turned on, if I am, by something which is part of my work because I have managed to make the focus of my work something which embraces music, art etc., and I think probably the ultimate turn on is the um.. dialectical in other words some sort of interaction between your understanding as part of your life as an academic and what is happening in real life. Not too happy for you to go away as a you know..... a construct, because as I say I don't really see the division, even though I have to talk about them in those terms in order to express it.

ice to someone

ting married.

INTERVIEWER

I think I'll turn over the tape at that point.

Right John, have you got any advice you would give somebody who is about to get married?

N

(long pause) I would be happy to talk to them and whether one calls it advice or not, I would leave it to other people to decide and it would also be very much a question of what about meant. If it was tomorrow or next week or something, in other words where the decision was virtually irrevocable what one would say would create very definite problems. What one would say if it was a question of talking to people with no particular intention of getting married although a normal assumption that they would get married. Yes I would have, as before, much the same thing to say, I would be a pretty boring person whether I am talking about marriage or solar energy or the third world um doesn't matter much to me because what I am interested in talking to people about is I suppose the deep structures of how they think about things

and how they have arrived at their particular beliefs and values and not in exchanging with them the fairly arbitrary positions which each of us hold on those things, which I assume what I believe, what my values are, are of no particular interest to them unless we are intimate in some way and without being arrogant, I hope um I don't think I have any particular interest in what their beliefs and values are either, but whether people should or should not get married at eighteen or twenty five, should or shouldn't sleep around or should or shouldn't abort if they have a positive amniocentesis the particular position the person adopts on that is of little interest to me and I assume my position is of little interest to them. I may be wrong in that. But um what I am interested in is how they got to that particular position and um.. elaborating on that. Unfortunately not many people I think, mean by that, it's a very threatening thing if you start to engage in it so normal conversation usually resists that.

DO YOU FEEL YOUR
ENTAILS?

INTERVIEWER

What do you see, or rather what do you think your job at the Open University involves?

Well I have pretty firm views on this I think. um.. It involves contributing to what I regard as a university education for the students of the Open University um.. that both those words actually throw up a lot of problems for the O.U. they throw up problems for normal universities too, but they throw up particular problems for the Open University in terms of whether or not it is actually a university and whether most of what goes on is actually education so I'm particularly concerned with that. Sounds.. sounds a bit high moralising I suppose but that's ultimately what I see the job as being. irrespective of what particular people or committees expect me to be doing at the Open University. which may often be in violent conflict with carrying out, for instance procedures regarding assessment, or course content,

or course production and the exigencies which, I agree are quite large, of teaching at a distance, quite often means that um... what I would call a university education is only approached very tentatively. That was the deep answer, I don't suppose you want the trivial answer like: I prepare courses and I maintain courses.....

INTERVIEWER

It's entirely up to you.

Plus get on with people and all the normal things that one does in the normal life. Those I take for granted. Teaching, well yes, I suppose I could say a few things, since I'm well known for carrying this particular banner, that I'm not at all interested in teaching um... subjects, because I don't think, in the company of Socrates, that you can teach subjects, you can only teach learning, and to put it another way - I'm only interested in helping students learn how to think. I'm certainly not interested in teaching them not to think, and I think there is a great danger in all universities and certain teachers tend to emphasise it I think - for people to be um... trying to teach students what to think and the more you have particular values which you wish to um.. well you wish other people would also hold, because the world would be a better place if they did hold them in your view. The more you think that way the further you get away from the university education. So um... upholding, I suppose, the grand tradition of education as learning for its own sake and not for any instrumental or extrinsic purpose, be it making the world a better place, the student a better equipped person for a particular job, a better parent in some specific way, a better citizen, all those I think actually flow from an education of the sort I am talking about. But they certainly don't flow from a training which sets out to teach specific things or those specific purposes. The more you do for those specific purposes the less likely you are, in my view to accomplish them.

rested are you
nt affairs.

VIEWER

Reverting back to the topics in the news, or current affairs, how interested would you say you are in these topics?

INTERVIEWER

Would you say you are fairly interested for example?

Well I read papers avidly and I certainly would give all the appearance of being very interested in um.. I think I'm more interested in why I'm interested; I think I'm reading them in a different way from the normal reader, mostly I'm reading them in the technical sense for the world views and values which they reflect, rather than for any intrinsic interest in the events as such. I mean, I can be very interested in the result of a particular horse race, that means interested in a material sense. I can be very interested in um.. how President Sadat was assassinated putting together the story, but also I'm interested in how that particular event is constructed by everyone. and um.. it would be hard to say that I'm terribly interested in, whatever it means in the event as such. I'm not sure that on reflection I know what that means (long pause)

INTERVIEWER

But how informed would you say that you are?

Very well informed.

INTERVIEWER

Would you?

I don't know how you are going to measure that, but I'm not actually, I'm not actually boasting about that because I think it reflects the fact that I waste a lot of my time reading newspapers. I'm too well informed actually in a trivial way because as you have probably gathered from what I say, a large amount of this information which is floating around and fills our newspapers, is actually of no substance whatsoever, even though a little well informed person is a so I don't think being well informed is at all a positive thing. If it doesn't go beneath the surface of the information to the meaning involved, and concern with how it has been put together it is probably a net cost to have well informed people, that's what is a problem with a lot of the students I think, and a lot of the courses at the

O.U. that they are concerned with making people better informed but information and education are totally different things.

INTERVIEWER

O.K. thanks John.

TRANSCRIPT IIInterview with JossNDINTERVIEWER

O.K. then Joss, how do you see the present situation in Poland?

Well I see it as a test of Western understanding of internal communist struggles. um.. if you ask how I personally see it, I see it as both hopeful for the Poles and very threatening because of the way that western leaders, particularly the United States have responded to it, If you want to know what general significance I attach to it, I attach significance as an attempt to break down the vestiges of Stalinism in a Russian client state in allegous to there being a revolution in one of America's supported military dictatorships in central America.

INTERVIEWER

Can you elaborate on that?

Well I find it personally hopeful that the Polish workers are struggling against the state bureacracy because I don't believe that they're trying to abolish socialism, as the western media would sometimes have us believe, um.. it seems to me that the workers want to make socialism work, um.. rather than to replace it and clearly there's a great deal wrong with Russian communism in terms of how it has been transplanted in Poland, um.. I'm no firend of that kind of regime any more than I feel particularly friendly toward any western expression of capitalism, to me they're equivalent, though in different ways, forms of tyranny, and the Polish workers I see as a grass roots movement, and therefore, hopeful movement of people struggling against tyranny and I would be supportive of that whether it was in Poland or in Brazil say. So I have made the distinction of how I personally see it and what significance I attach to it generally, um.. I'm fearful that... well let me put it this way, one of the things I find most distrubing about the troubles is that America, more than any other western nation feels that it has a right to dictate what Russia can or can't, or should and shouldn't do in Poland, um.. as if Russia shouldn't be able to do what it wishes with a client state, in the way that the United States do, for example, sending

marines into the Dominican Republic or aid to El Salvador, or even threatening, as Castro would have us believe to invade Cuba or use atomic weapons. um.. so this, this global moralism that America has, seems particularly pointed out by the events in Poland and um.. I find that very threatening and destructive and that's the other side of the case of what significance I attach to it generally.

INTERVIEWER

Would you see Russia as a potential threat to Poland?

Yes, Polish people as I have read in history, have felt a good deal threatened by everyone from the east and from the west, Poland has been a corridor several times for German troops to march through devastating, or Russian troops to march through devastating and um.. there is enough of a national identity there a very strong national identity really, um.. to make them fearful that those things will happen again.

INTERVIEWER

Yes, do you know anything about the history of Poland?

Very little, I mean Nicholas Copernicus was born there and did his work, the catholic church has had a strong foothold there for many centuries and there were some Sisinians there in the seventeenth century, um.. that's about it really. There are a couple of very famous Polish philosophers in this century, but it's just bits and bobs really and this general concept of the nation as being a sort of persecuted Christ amongst nations, um.. I mean you can see where people get that idea, but I have read that that this is the Polish national motif.

INTERVIEWER

Yes.. Do you know any Polish people?

I have met several Polish people, I wouldn't say that I know them, the longest talk that I had with a Polish person about what it meant to be Polish, was with a displaced Pole, displaced after the second world war, living in Bedfordshire amongst

other Polish people um.. with whom he spoke Polish in the pub, and he told me a number of stories which others regarded as tall tales, about being dropped by air behind the fascist lines in Italy and having to carry out explosive raids and so on, but it was very clear to me that he as a Pole with a strong Polish identity, wanted to liberate his mother land from communist domination and so forth. That's the closest contact, it was an evening's discussion really with this....

LENCE ON TELEVISION

VIEWER

Oh I see yes. Right to change the topic, have you got any views about violence on television?

Well that's really complicated.

VIEWER

Well perhaps you could fill me in.

Well as on the last subject, I'm just, you know um.. I'm um.. I'm pretending to be the authority I'm not, if I say anything really that isn't totally hedged about qualify. I don't think that there is any question that violence portrayed without a qualifying commentary, or without a qualifying context that either helps you to understand its meaning, its sources, or helps you to deprecate it, or to see that it is essential if one happened to believe that the violence was um.. was justified against military aggressions, without that context, without um.. the commentary, I think that the violence, um.. people begin to think of violence as something that is natural, that's O.K., that's glorious, that's lots of fun, cops and robbers sort of thing and um.. that goes for the cinema as well. I'm not making very good sense, what I want to get away from is the simplistic condemnation of violence because it is violence, I think that there are lots of things that are portrayed in the media, or in literature that are realistic and need to be portrayed because they have a very good point about them, not simply to entertain with the violence itself. So I don't want to be prudish about this, national viewers and listeners sort of approach, but I am

I deplore violence as a rule anywhere, and when it's Starsky and Hutch or Kojak um.. doing things, or say a brawl in a tavern, or a John Wayne movie where lots of people get slugged and you never see their teeth come out in bits, you never see their jaws broken, it's a total unrealistic sort of violence, which makes it look like good fun. The same would go for depictions of battle, with very few exceptions, most of those movies are unrealistic and leave you with no moral taint afterwards, except that would a good watch, or a good read.

VIEWER

Can you elaborate on what you think is violence in the arts?

JOSS

Um.. what do you mean - the arts?

VIEWER

Well didn't you... haven't you just mentioned the arts as an area?

Well does that include cinematography?

VIEWER

Yes.

What violence would mean? Well I can beg the question by saying "is any form of dehumanisation" but then the word becomes so vague that anything that you don't like, that you feel's personally dehumanising becomes an act of violence against yourself, for example: You don't like the way I don't answer the questions, you just say "you're doing violence to the subject" or if I'm actually striking back at you personally for some view you hold, you can say that I'm doing violence to you, that's verbal violence, well I don't know about all of that. I'm most tempted to believe that things are violent um.. for example: governments like the South African government accuse guerrillas of violence against the state, um.. people counter that by saying that the state has organised systematically violence against coloured people and black people, um.. that's not always the kind of violence you get with terrorists attacks on crowded

cinemas. Sometimes that violence is just the um, the, the ritual implementation of pass laws or something like that. Is that violence even though no one has been cut up, or shot up, or blown up, I would be inclined to say "yes that is violence" and if that is... there are some kinds of violence which are really quite easy to portray, people getting blown up for example or an air liner crashing could be violent, scenes from "A Lion In Winter" I remember, um where there is a good deal of verbal violence, sometimes physical violence between people, lots of movies like that, um.. "The Deer Hunter" portrays violence in an incredibly realistic way. I think that sometimes it is justified to do that, depending on the end that one has for portraying violence. Or there is the soft kind, if you'll pardon that expression, I'm not sure whether it means the soft kind, the sort of verbal kind, or whether it's the kind um.. you get in The Deer Hunter - people playing Russian roulette, in that case I don't feel it is justified at all because the film makers aim, as I interpret it was to point out the beat- liness of slant eyed groups in Vietnam and the um.. way that the American military people were persecuted in their noble fight against communism. I think it is an incredibly pernicious film. So the violence there was not meaningless violence, I just disagree with the meaning.

INTERVIEWER

Yes. Would you say that sports like boxing and karate are fringe violence?

What do you mean by 'fringe'?

INTERVIEWER

Well they are violent acts.

Well yes and driving a nail is with a hammer too. um.. I can throw a stone through a window because I'm helping demolish a building, I can throw a stone through a window because I hate the person inside, in one case the act is violent, in the other it isn't. I don't want to make the violence inherent in the intention because it's a question of who's intention um.. and violence is in the eye of the beholder, or in the eye of the

person who assigns intentions, um.. I mean there obviously is a difference, I just don't know how to make the distinction between um.. a fist fight in a pub and a boxing match, um.. I'm talking about making a physical distinction, rather than a distinction based on intentions, you could say one's controlled and the other one isn't controlled. But you could argue that a pub brawl is controlled to some extent by external pressures um.. people are done injury in either case, physical injury and just as they are in automobile accidents, or falling from roofs of houses, or from their own beds and when people are done injury that's getting back to the term that I used at the beginning - dehumanisation um.. something that is not good for the wellbeing; I'm trading in um.. I'm begging questions, I realise this. But there is something deleterious for the whole person there. So I think that ultimately the definition of violence perhaps has to depend on some definition of personhood, of what it means to be a human being, and then you measure acts by or against the individual in those terms.

VIEWER

Yes would you say that violent acts on television and in films aid violence in family life?

Well in the sense that it gives people some ideas of what to do, I mean who have committed crimes offer an excuse, it may be after the fact, that they saw it done on television. Well you don't know how many of these to believe, or we shouldn't know how many to believe, um.. I think that um.. by making... it all depends what kind of violence, you see violence in the home well I'm not sure how much of that is portrayed on television, I should have thought that by adjusting, by helping, by acclimating people to violence, by them seeing it performed unrealistically, in the theatre of the home - the living room, on the television, it makes people more accepting toward violence that arises for other reasons within that group of people, or toward that group of people, or within the society that the group or family is located. um.. I think ultimately most of the violence that is

experienced in the home comes from outside, that is, it is forced from outside by experiences of the members in their lives who try to live with each other in the home and television has a secondary role in that.

MOONS/SOLAR ENERGY

INTERVIEWER

Right a different sort of topic altogether, the other week a fellow crossed the channel using a balloon and solar energy do you foresee the balloon as a form of transport in the future?

This wasn't the fellow who pedalled his way across in a light airplane?

INTERVIEWER

No, it was in August actually it was about August 23rd something like this,

Yes that's the weekend I was in France in the Autumn launch and I didn't hear anything about it.

INTERVIEWER

He used a double skinned balloon in actual fact.

And he had electric motors powered by solar cells?

INTERVIEWER

Yes. um.. the crossing took about two and a half hours something like that, it was very fast.

Well I don't know, I don't personally see that um.. that it's going to make it, whether or not I would want it to is another question.

INTERVIEWER

Well would you want it to?

Well that would take more thought than we have time to give to it um..

INTERVIEWER

Well you've got plenty of time (laughter)

Um.. that particular form of transport - you're asking whether I think it is viable?

INTERVIEWER

Yes. After all we um.. do use solar heating or solar energy in the new technologies like solar heating, there are large projects going on up here in Milton Keynes.

3

Yes well the solar energy is wonderful and I think if that had been exploited in the same way that nuclear power was after the first world war, we would have in many ways, not in many ways, in some ways a different kind of society, and in the future we would certainly have a different kind of society, it means emerging on the basis of nuclear energy. So um.. yes, yes I'm quite aware of that, but whether balloons powered by solar cells driving electric motors are going to be viable, I can't really say. I mean it would be fun to ride in one, I can't see people transporting steel girders in the things across country. I think it would be difficult to see whether... for them to be made very safe and I cannot see it as a form of mass public transport, um.. because, because I wonder whether it would be possible to get the required solar cells on to the balloon, get the solar cells on the balloon in sufficient number, what I mean is to make the balloon big enough to take all the solar cells that would be required to drive motors to move say seventy people like a bus would. If it doesn't become a form of public transport then it's up to individuals and if it becomes widespread can you imagine what the skies would look like, um.. presumably this is a fairly large object, so I can't see....

INTERVIEWER

Yes.. Zeppelin type.

Yes, I can't see that's going to become anything except perhaps short haul transport for a few people and perhaps in the foreseeable future only a kind of hobby really.

INTERVIEWER

Yes, there's a lot of preparation involved in getting up a solar energy balloon.

Yes, you might say it's rather a middle class activity, other people have more immediate demands on their lives, that don't free them for building balloon and skooting around one by one.

I think it's fulfilling and it's fun and that sort of thing, I wonder whether our applications of solar energy might not be more public spirited than building balloons to go across the English channel. But I'm quite open to being convinced that there is more in it than I can see.

INTERVIEWER

Yes. What do you think of the use of solar energy for solar heating?

Would you mean sort of a direct conversion, we're not talking about solar cells now, we're talking about um.. absorbing panels, heat transferred to water and storage. I think it's great. I'm not sure it will work in Britain because you cannot be sure whether there is going to be sun here, or whether there is any sun, I mean I've been in this country nine years and apart from the summer of '76, I can't see any summer that would have offered me a warm winter, had I been heating my water and storing it away. But I think it is unforgivable, well it is forgivable, but I mean it is greatly to be deplored that solar heating of the kind that you mentioned hasn't been used in countries such as the United States, in the southern United States where there is a massive consumption of energy, and a great deal of available sunlight throughout the year.

INTERVIEWER

Yes places like California?

Yes, yes. States like Nevada or Utah instead of putting up MX missile silos over four thousand or five thousand square miles, in fact it's hundreds of thousands I think it's more like four thousand silos over a hundred thousand square miles, you could cover that with solar cells, or heat exchanges and you could keep a whole half the country warm and in power if the technology was right. I'm talking off the top of my head now, but if the principal is what I'm trying to drive home. The space could be used for something along the lines we're talking about. In that country particularly and in those states

THIRD WORLD

in particular where there is so much sunlight the year round.

INTERVIEWER

Right have you got any views on the development of the third world politically and economically?

Well yes, what ones do you want?

INTERVIEWER

All of them.

(Laughing) oh well.

INTERVIEWER

It doesn't matter if this is the only topic you can do before your course team meeting, I really you know would like to have your thoughts on this.

Well lets see we've had violence and solar energy and Poland and the third world, do you work for anyone else besides the Open University?

INTERVIEWER

No (laughing) the topics have been carefully chosen after long discussions with my supervisors..

Yes to sort of make people maximumly vulnerable?

INTERVIEWER

I don't think so.

Yes well you're soliciting opinions on a range of issues which many people would regard as very urgent and um.. I suppose you have found that most of the people have spoken with some conviction on most of them.

INTERVIEWER

Yes but obviously what one says in these interviews are obviously confidential.

Oh I'm not worried, I'm not worried, I would say all this in public if I could say it well enough, but you know I'm talking without any preparation at all.

INTERVIEWER

One has to sort of pick topics which people hopefully will feel strongly about, or have thought through in order to look at sort of cognitive processes and how they think, we just don't want snappy answers, or sort of, an answer which is made up of snippets from the news that morning.

JOSS

No, well fortunately I haven't listened to the news because my radio is broken and I haven't read a newspaper for three days.

INTERVIEWER

Yes, but you've obviously thought through some of these things, I mean for example: Poland you said "well I don't know much about it" it might not have been of interest to you, you see. But obviously the third world is, so if you have got some strong points on how the third world should be developed that would be fine.

JOSS

Well I think that if we asked enough questions on this line it would be clear that my answers are all more or less based on certain assumptions that I'm not coming out with immediately, but, there is a certain sort of a way that I try to conceive the world which doesn't give me answers, but it helps me to get answers.

INTERVIEWER

More a sort of strategy?

JOSS

It's partly a strategy its partly an analysis, perhaps the analysis and the strategy overlap completely.

INTERVIEWER

Yes can you outline that, or don't you want to divulge that?

JOSS

Well all right, take the third world as an example um.. when we talk about first, second and third, when we carve up the world like this and categorize it, what are we referring to? what are the discriminating characteristics? they aren't biological, it's not race, it's not intelligence because people haven't been tested, though some people would rest on race and intelligence as a way of discriminating the world

like that, um.. are we dividing according to nations, are there certain um.. some nations have the quality of being third worldish and others first and second owrldish? um..

INTERVIEWER

Is it a case of Plato's Republic all over again, the gold and silver and brass people?

JOSS

Well I don't think... I mean that may provide an analogy for looking at it. People tend to talk more in terms of north/south rather than anything else, I think it's a historical problem I don't say that just because I'm an historian, I think that what we call the third world has emerged for reasons which can only be understood historically and solutions to third world problems will only be realised in a historical process which we ourselves are creating, um.. I think that, and here I'm talking in general about strategies, about how people organise themselves what organisations amongst people are significant ones, um.. how people organise their lives economically, how countries are dependent on one another to meet the requirements of their economic organisations and that projected through history is the way I want to look at most of what we have been talking about.. um.. I'm less qualified to talk about Poland than perhaps um.. violence or the third world having been through them myself, I mean at a time when I wasn't thinking of first, second or third world, I was just thinking in terms of incredible poverty and what awful poverty there was in Bolivia, you know, or in Mexico or somewhere which I've seen but, never why there is poverty, I mean that's a very important question, why is there a third world, why are there people who consume a fraction of the earth's resources and of the earth's energy than other people on the same globe do, I think it's a political problem I don't think there's anything inherent or inescapable, I don't think that there always have to be people on the bottom of the pack, the third whatever you want to call it, bottom of the heap um.. it's happened for certain reasons that involve colonisation, exploitation, um.. by countries in the north and the west who for whatever reasons have developed a momentum an ethos in history which required them sometimes with a thought of being benevolent

to treat other people that way and these people began to resent that I suppose and there were nationalist movements the countries which you now call the third world, freed themselves from the sometimes, intended benevolence leadership of countries we now call the first world and now these countries are having to fend for themselves, sometimes they do it very well because they still have things that countries who totally dominated them need even as independent nation states and some times they're doing very poorly because they have nothing to sell but tourism or their people into slavery. But I'm talking in economic terms now and I'm not qualified to come up with facts and figures but I do want to see the problems as a historic one and an economic one. How do we distribute the goods and services that are available.

INTERVIEWER

Can you elaborate on that? the historical position.

JOSS

It's a very big um.. very big um..

INTERVIEWER

Well what might be apparent to you is not apparent to me.

JOSS

Well it connects with my interest in science through the scientific revolution, the rise of capitalism in the west. and now we're talking about the fifteenth, sixteenth, seventeenth century, sixteenth and seventeenth mainly, what.. where did the momentum come from that reached out subsequently, not only to explore but to conquer and subdue other parts of the world, other people, a whole range of natural knowledge, the spirit was the same it was aggressive an outward thrust, what was beyond itself, whether it was the nation or the individual researcher, the individual capitalist, there were markets to conquer, there were bodies of knowledge to put under the subjection of experts um there were people to enlighten and to christianise. There was an outward thrust based on certain assumptions about those who were thrusting out, but about their nation about the rightness of their cause, about the inner viability of what they were doing and if I had to locate historically where the present mal-distribution of the earth's resources, the present global

tensions have arisen I would put it in the sixteenth and seventeenth centuries, perhaps back in the fifteenth century. I would place it in west and not in the east, I would locate it in northern Europe and Britain - the first industrialised country, rather of course than America which wasn't colonised until the seventeenth century, um.. perhaps one of the first fruits of this outward thrust as I have called it was the peopling of America with people who looked upon it as their new Zion, where they would build the kingdom of god. A recurrent theme in American history which accounts I think in large measure for American moralism.

INTERVIEWER

Is this the pilgrim fathers and...

JOSS

That's right, there's a whole mythology about them now. But a recurring theme in American history is that this is a christian nation um.. it's founding fathers, and now we're talking about the eighteenth century were godly men um.. and we not only have a duty to purify ourselves but to purify the world and god is invoked as being a Messiah. I think it's pure rubbish, it's pure unmitigated conceit and self-righteousness. Americans are wrong about their founding fathers, they weren't godly christian men on the whole and America knows nothing of the judgement of god, or seems to know nothing of the judgement of god, certainly nothing about repentance. In the case of Vietnam - a third world country is absolutely typical, um.. but now we are a long way from where I started out in history. I can speak more about America than I can about Europe and the west generally. But maybe that's as well because America represents the, the most virulent forms of exploitation of the third world. It's this level you know, still there.

INTERVIEWER

Yes, yes you've still got some tape left. (laughter)

JOSS

Well I don't know, I'm sort of running out of things to say really, sort of running at the mouth.

INTERVIEWER

Well it's getting most interesting actually, I was just wondering how you came to the conclusion that the pilgrim fathers weren't sort of, well.. christian isn't the right phrase I'm searching for but....

JOSS

I had better make a distinction between the pilgrim fathers and the founding fathers. The founding fathers were people like Jefferson and um.. the people who signed the declaration of independence - who wrote the declaration of independence and the bill of rights and so forth. Jefferson decided that he didn't like most of the stuff in the bible or the new testament, so he wrote and published his own version, which shows how fast and loose he was able to play with christianity. These other fellows were far more influenced by rationalism, or the French enlightenment than they were by any kind of orthodox christianity, which is not to say that there weren't any sort of Presbyterians say or..

INTERVIEWER

Didn't they come from a Brethren or a Quaker background, these folk?

JOSS

Some of them yes, but um..

INTERVIEWER

Very non-conformist weren't they?

JOSS

Yes they were all non-conformist sure.

INTERVIEWER

I can't actually remember after all.. I'm sort of digging around in the depths of my brain.

JOSS

Yes my ignorance too. But when we go back to the seventeenth century, the kind of people who were sent to America, were political puritans who were quite happy to have a new start in a country where they were not discriminated against. um.. of course they ended up reproducing a lot of the problems they had experienced in England, but one thing they wouldn't have

was a monarchy. They wouldn't tolerate the monarch's exploitation of them at the time that they declared themselves independent from Britain.

INTERVIEWER

and yet quite a lot of Americans talk about Britain in a quite nostalgic way and we are part of you..

JOSS

Short memories, short memories, it's the sort of.. it's the outlook that sweeps America's past under the carpet as well.

INTERVIEWER

I've heard this fairly recently actually, from two or three Americans - we're part of the British...

JOSS

That's right, our American cousins or our British cousins, that sort of chumminess. This may be coming to an end you know, if we in this country don't allow cruise missiles over here. I mean America would like now for Britain to be targetted, in a way that its not prepared to allow itself to be targetted. I mean America will stick its cruise missiles as well as these Mobile missiles out in Nevada or Utah or somewhere where hardly anybody lives. They'll drive them around in lorries, but they are prepared to drive them around in Oxfordshire here, which makes us a target because these are first strike missiles you know. So I'm not sure how much love America really has for Britain its prepared to have a limited nuclear warfare in the European theatre I mean that would affect Britain presumably as well. So that would alter Anglo American relations and um.. we were actually talking about the third world.

INTERVIEWER

Have you got any other feelings about the third world?

JOSS

I don't know the questions about the third world, I would like to know how much of what we call third world was colonised by Britain, how much of it um in proportion was colonised by

Germany and France and Portugal, um.. then I would like to look at and maybe these aren't significant questions, I would like to find out how well off relatively speaking these former colonies are. Look at America's colonies, we don't tend to think of them as colonies but the Phillipines, Cuba, Puerto Rico um The Virgin Islands, some Pacific Islands which are to all intents and purposes America's colonies and see how well off they are. There are really interesting questions about the formation of colonies and then the liberation if you want through nationalist movements later on, most of them, many times in this century. There's lots of questions there about economic dependence and um.. alliances within the colonies themselves which I don't know the answers too. But the momentum behind the formation of the third world and the liberation of the third world I think will be.. is an economic one based on certain assumptions of human nature and about national destiny.

INTERVIEWER

O.K. Thanks Joss, I'll finish the interview there so that you can go to your course team meeting.

JOSS

O.K. O.K.

HUNGER STRIKERS

INTERVIEWER

You know there have been prisoners in the Maize prison in Ireland on hunger strike for quite some time. Do you feel that these prisoners should be given political status?

JOSS

Well when Robin Day asked me that question on The World at One, I told him... Yes definitely, um.. the categories political prisoner - terrorist um.. let's start with terrorist; the category terrorist is a political category from the point of view of any established government, people who take up arms against it from within are terrorists, but no revolution would have ever taken place if there hadn't been terrorists of that sort. I'm sure George III regarded the continental army as a group of terrorists, particularly because they did not fight the way the British army did in the war of independence in America. I imagine that the northern states regarded the confed-

erate soldiers as terrorists; at least unofficially um.. since terrorist is a political category it seems to me that you can't put terrorists in prison without regarding them as political prisoners, um.. you can call them murderers but.. calling them murderers makes it look sort of very un-political doesn't it?

INTERVIEWER

Yes, yes.

JOSS

But a murderer can be anyone who kills another person in cold blood, whether or not in self-defence, it's a question of whether it's first, second or third degree. It's clear that soldiers in Northern Ireland kill people in self-defence or in cold blood - both have happened. But they're not considered to be murderers there are certain procedures for trying them in courts and convicting them of murder but I think that that is not the norm. There is a lot of forgiveness that goes on in the army. I know that because I spent the evening last night with a guy who defuses bombs in Northern Ireland and he was referring to young children in Northern Ireland as terrorists because they were throwing missiles and petrol bombs, he said at the troops coached by their big brothers and fathers from the back. um.. and he was a guy who grew up in Toxtieth and was a member of street gangs and he made a clear distinction¹ between these guys and these little kids in Northern Ireland. I am saying all of this to try to establish the relativity of terms like 'terrorist' and 'murderer' which are applied with impunity toward the people who want to be given political prisoner status in Northern Ireland and um.. the tables could turn, if Ireland were united and British troops stayed over there the Irish government would regard them as terrorists. The Unionists would regard the Irish troops as illegitimate or if there was an inamicable settlement and they would be regarded as terrorists and so it's a slanging match and I think the word terrorist or murderer is used for political purposes by the government in authority in Northern Ireland. It's up

to us to decide if those categories are worth transcending in the light of historically what has happened in situations of conflict, how the tables have turned and the terrorists have come to power and so on. I mean what would the Bourbons have thought of Giscard De'stang or Mitterand or any of their latter day followers if they felt that they would one day be in power you know, if some time two hundred years from now these terrorists would get power, you know they are not terrorists and you can't conceive of them being terrorists but obviously at one stage republicans were a threat to the monarchy in France so um.. my first reason for giving them political status is by arguing historically for the relativity, the epithets that are applied to the people who are presently in prison um.. there are other reasons for giving them political status; I suppose one of them would be that if you think that prisoners ought to be treated in a humanitarian way and non-political prisoners are not treated in a humanitarian way, then in order to give these present prisoners humanitarian treatment they should be called political ones because I'm assuming that political prisoners are actually accorded preferential status. The categories exist; and this is what I don't know very much about, how people distinguish in Northern Ireland or in this country for that matter between a political and a non-political prisoner. Do we have a category called political prisoner which may apply to some people and not to others in this country or in Northern Ireland? I don't know. I expect we do.. I would like to meet one. I would like to know what one did to become a political prisoner rather than a murderer or a terrorist or a common criminal. My personal view is that all prisoners are political prisoners because I don't think that politics is a separate sphere of life; all of life is political and ultimately I'm not talking about explicit motives, I'm talking about um.. what is tacit or political forces that end some people up in prison and I think if we just lost the category 'political prisoner' and just regarded people as being detained against their will, or sometimes because they want to be; um.. things

would be a lot easier. I mean to give them all humanitarian treatment.

INTERVIEWER

Would you say a political prisoner is different from a prisoner who is a prisoner of conscience?

JOSS

Well that would depend on what it was about the person's conscience that ended the person up in prison um.. maybe I would go to prison because I refused to fight in a war; well to me I would be a political prisoner that's a political reason because my conscience says "no I won't fight" um.. could a person become a prisoner of conscience because their conscience said "I will eat meat on Friday" now is that a political reason, I think ultimately it is a political reason. People have moraise like not eating meat on Friday which become laws for political reasons. Even though the Roamn Catholic church would say "Oh no it's a theoligical reason or a doctrinal reason" you could think of lots of things which would be criteria for sending people to prison um.. eating meat on Friday's one ofr them. um.. my conscience can tell me all kinds of things - like I ought to be allowed to drive a hundred miles per hour on the motorway, I always will travel as quickly as possible between two points, my consience says "that as a matter of using my time to the best advantage I'm such an important person that I should be allowed to travel that fast" I don't know that anyone would assign that act to conscience or not but um... if I were put into prison because of.. I consistently travelled too fast on the motorway, would I on those terms be a prisoner of conscience? um.. certainly not form the law's point of view. There are some things the law regards as being conscienable I suppose; or not conscienable - unconscienable to have driven too fast, but conscience will tell you, you know to observe or not finding I think that the distinction blurs between a prisoner of conscience, a political prisoner and a what we call a common prisoner, a common criminal. I'm sure that some people are capable of making a very fine distinction indeed, but ultimately if they separate political from other kinds of prisoners they must be able to differentiate in human

life between those things which are political and those things which aren't and I find that ultimately very difficult to do.

INTERVIEWER

Yes. Would you say that the prisoners on hunger strike are prisoners of conscience - they are fighting for a cause.

JOSS

Yes but they're not there because they believe in a cause. They're there because in fighting for the cause they've violated the laws of the land. It wasn't just a matter of them refusing to do something, it was their aggression which ended them up there. um.. if I don't fight in a war I can be locked up. If I lived in '14-'18 period, um.. if I was a Japanese in California during the second world war I'd get herded into a concentration camp because I was Japanese, or because I wouldn't fight or because I was a threat or something; well those are prisoners of conscience or nationality or whatever political prisoners I think ultimately. But if in refusing to fight a war I also burn my draft card and destroy government property, which it was called - then I could be accused of an aggressive act, not just an act of refusal. um. . . how can your conscience tell you only to refuse things and not to do things?

INTERVIEWER

Well it can't actually, I mean it's a two way thing isn't it?

JOSS

Yes I think it is and not doing something is. . . there's no such thing as not doing something.

INTERVIEWER

No you're still making the decision, whether . . even if you do it or you don't do it.

JOSS

That's right, there's no not making decisions. Decisions are made and I think it's a basis of how people decide to behave, whether that behaviour is aggressive or in the form a refusal that ends them up behind um.. getting them locked away. I think that there is no question that they should be given political status. The only reason they aren't being given political status is because it implies a recognition that they have a cause.

Or a just cause, they might have a just cause, and that's the last thing the British government wants to do.

HOBBIES

INTERVIEWER

Right to turn to something different Joss. Have you got a hobby or a pastime that you indulge in outside of the Open University, something that really turns you on?

JOSS

Well that's a um.. quite a question, you indulge in something and it turns you on? Is that the way you want to phrase it?

INTERVIEWER

Not necessari~~l~~y, but something which you do which is totally different from your work at the Open University. Something which you enjoy.

JOSS

Well this relates to the early question because it depends on looking at life in compartmental terms like; this is that and this is for that and never the twain shall meet sort of thing. Like my private life and my public life are not connected, or it is possible for my to take interests in things for reasons completely other than I take interests in my remunerative employment, um. . . people tell me that I ought to detach myself from, from the work that I get paid for to do other things totally unrelated, I've always found it difficult to do things totally unrelated, for example I suppose the thing that some people would regard as my hobby, I have from the beginning done for academic reasons - and that is to scout and buy books related to subjects that I'm interested in, and those subjects are the subjects that I get paid to write and talk about. It's not really collecting in the sense that some people collect Hentie boys novels and they try to get every binding variant and every colation variant and all the editions in all the languages in the world; I mean I'm not into that I think that's a bit. . . that is indulgent, self-indulgent, involves a great deal more time and money to highly neurotic ends involving completeness and order, um. . . I'm much more interested in getting examples of the whole literature that I

think is very important literature otherwise I wouldn't be studying it, and these eventually become tools. I suppose it's like a carpenter who also collects woodworking tools, or collects old woodworking tools and uses them in a craftsman like way um. . from time to time (the old tools I mean) to build furniture or to build furniture in an old way. It's not a perfect analogy, um. . it would be hard to say that carpenter's hobby apart from his work was old woodworking tools, as there are obviously connections. I used to play the trumpet I don't any more, I've toyed with the idea of picking it up again, I've even purchased a second hand cornet, um. . . if I were to be doing that there would be very little connection with my work at the Open University. um. . and I would enjoy it, I would enjoy being able to play the cornet good enough - well enough to play in a jazz band or something like that, I've great admiration for people who can play trumpet that well, I played for nine years and never got quite that far, although I was fairly good. That isn't a hobby, perhaps it's a measure of how relative . . .

INTERVIEWER

It's a pastime?

JOSS

Oh that would be a hobby if I did it, but it isn't a hobby. maybe the book collecting for lack of a better term is a hobby - um . . . is a pastime . . . is a hobby. I mean some people would regard watching television as a hobby, I don't do that enough, or go to movies, or participate in any cultural events or in political groups, or in other ginger groups to regard them as being hobbies and they certainly wouldn't be connected, disconnected from my work. - um. . . is it a hobby to be fixing up one's house because it is dilapidated, painting wallpapering, but it's not really a form of relaxation like collecting stamps or even collecting books is, because there is a certain urgency about it - you're doing it because you have to, because you can't live in a tip. If the definition of hobby is what you do to relax and tune out of what you have to do to

make a living, then I don't suppose I have a hobby. I am an amateur radio operator, I have been since 1960 and I haven't taken that up because it is expensive and time consuming and I don't think it's terribly original or creative you just sort of sit and talk on a radio, you could do that on the telephone, when I was a teenager I thought it was very exciting to get up in the morning and turn on my radio transmitter and receiver and talk to people in gee whizz California or somewhere like that or even around the world for five minutes you know 'wow I talked to the Congo' as it was then I thought that was really super, I can't get all turned on about that now. Maybe communicating by amateur radio satellites, bouncing signals off the moon to someone across the country would be exciting, it's all very highly technological all very specialised, time consuming, the people who tend to do it - go in for it at that level are themselves engineers and it has the same relationship to their employment as collecting books has to my employment, so I can't really get into that because that would mean it would end up being more than a hobby if I did it in a way that would satisfy me. So that's why I don't pick it up.

INTERVIEWER

How do you relax outside of work?

JOSS

So much of my work is bound up in not relating to people, because I work in this institution I don't give lectures, I sit and I write and read that a lot of my relaxation has to do I think with relating to people and very frequently that's in a pub sort of context um . . . sometimes it . . . well like last night I went to the disco here which I thought was very good and relaxing because I wasn't thinking about my work, the music spaced my mind out, I was able to talk to people, I got slightly pissed, um . . . that was a good occasion, you know: and I was with this guy I mentioned earlier who was in Northern Ireland and so we had some heavy conversation you know, I mean I basically just listened to him, I didn't lay anything on him and that was a good thing, that was relaxing, but it's not something I mean I've got the sort of personality that's sort

neurotic; if I were to pick up something as a hobby, to do it for relaxation it would be difficult for me not to do it intensely and if I did it intensely it would cease to be a hobby, and so for me it's got to be something you can take or leave in the gaps of time um . . . something that you don't have to book to do I think. Maybe playing squash would be a good idea (you have to book here) if I could just go out and play tennis you know because there was a court free and I fancied it and there were people around, I would find that very relaxing, I have done that a few times but as soon as it starts to become a regular thing, a schedule, like the a course team meeting or something um . . then it starts to lose its hobby aspect and takes on the aspect of a chore for me. So it has got to be non-schedulable and something that isn't pursued intensely and something that doesn't relate to what I'm doing for my employment and I haven't found it yet, maybe it never will be it

ADVICE FOR SOMEONE
GETTING MARRIED.

INTERVIEWER

Right have you got any advice for someone getting married?

JOSS

DON'T!

INTERVIEWER

(laughing) do you believe in the institution of marriage?
Or would you say live together?

JOSS

Well I mean I live with someone now um. . but that doesn't mean that you don't believe in marriage. As a matter of fact I don't believe in marriage but living with someone doesn't mean that you're not going to get married or that you don't think that marriage is a good thing. um . . living with someone can be to all intents and purposes marriage because of the way you live together and the way you spend your lives. If I lived with a woman (or a man for that matter) and that person was totally devoted to me in that way that most marriages seem

to work and there was a division of labour so that she took care of the kids and took care of the house, and I was the principle bread winner and was freed from those domestic responsibilities; then it would be a carbon copy of marriage and there would be very little to choose between it. I think that marriage is highly political - perhaps more political than other things that we tend to think of as politics because it touches us personally day by day and it more closely, more obviously than decisions to um . . . the decisions the cabinet takes, or the decisions the DHSS takes or something like that, and because it is political um . . . like all of life is (as I was saying earlier) we have to. . . . I think we have to make decisions about living arrangements or about marriage based on notions of the common good or what's. . . on the basis of political assumptions in other words and um . . . now you ask for my advice, not why I don't believe in marriage.

INTERVIEWER

But would you give someone advice about getting married?

JOSS

I would be tempted to, but that comes across as highly moralistic. If someone asked me I would tell them, I mean I have been known (even within the last twenty four hours) to applaud someone's decision not to be getting married at the moment, I didn't come out and say "and don't you ever do it" I just sort of said "good" with a big grin. If I went around telling people not to get married I would be as bad as people going round saying "but you should be married if you're living together". If I were asked I would say "no don't do it" and if they said "why" I would say "well why do you want to, what's it going to give you that you couldn't have anyhow" and I could imagine the answers that would come, but I don't think any of the answers wash. It's clear that if I was asking a cabinet minister or someone with an interest in the established form of government or the established kind of society that we have, then that person might tell me that there are real advantages to getting married and it's right and proper that you should do, because on it depends the social order we enjoy, now that would be a

different sort of argument. That person would be arguing for marriage politically where someone else would be arguing; some private individual would say "but it gives me security" or something like that and I would meet that sort of an objection in the same way um .. in a different way. If someone said to me "it would give me security" I would say "but you don't really have any more security there, you only have the illusion of security, it only makes your life more difficult if you find out eventually you didn't have the security you thought you had" and to the bureaucrat or whoever is arguing for marriage in political terms I would say "that's fine it shows what your politics are that you think so much of marriage. If you really wanted people to be able to change their relationships with each other and to have a different form of society, then you would argue that at this most intimate level of our lives there should be fundamental changes as well" and that's a different sort of argument from the one I would put to the person who is just worried about security or "am I going to have children, or who is going to take care of my children". I think ultimately both questions get answered on the basis of the same assumptions but have to be dealt with very differently but no I wouldn't advise a person to get married and I would argue against it.

'MY JOB'

INTERVIEWER

Right thanks Joss can you outline what you think your job at the Open University involves?

JOSS

Well people who have asked me that - um.. what do you do at the Open University, I say "well I'm sort of a hack writer for Britain's largest correspondence school" I actually said this to someone the other night and they weren't quite sure what a hack writer was and I said "someone who gets paid for writing stuff by the word" and it's not quite that simple, but it seems to me that, and most obviously, my first most obvious task is as a writer um. . . of correspondence materials,

secondly it would be as a participant in course teams, planning other people's writing as well as my own, commenting on it and making decisions about general outlines of things that people are going to write um. . and I should add to the writing the other media which ultimately is based on the writing but which involves not sort of private endeavour but sort of liasing with the B.B.C. so we've gone from writing to committee work to liason work based on writing and um. . . there seems to me there ought to be more, something grander perhaps that encompasses those three points um. . something more general about support of the institution.

INTERVIEWER

It would probably be on a job specification I would think wouldn't it - subscribes to the ideas of the I.E.T. or something.

JOSS

You see that wouldn't get on a job specification because unlike marriage because unlike marriage you don't have to believe in this institution to be a part of it; but for me that was an important factor and so I would say "my job involves" did you use the word involves?

INTERVIEWER

Yes.

JOSS

Yes well it involves not only those practical tasks but it involves (you want to say it involves something that isn't a behavioural thing) it involves a certain to educating adults who didn't have the chance because of the discriminatory educational system in this country to obtain the qualifications that this society regards as money making ones. Although there are some people, perhaps many people here actually who are genuinely interested in learning about life and the world and history and the arts and those people I have even more sympathy for and I think my job involves a commitment to them as well as those who have been disadvantaged and want to catch up and make up for lost time. So there it is it's writing, it's committees planning others writing, it's liason with people working in other

media based on writing and. . . but overall i is a commitment to ideals of adult further education in a highly discriminatory context.

HOW INTERESTED IN
CURRENT TOPICS
ARE YOU?

INTERVIEWER

Right how interested are you Joss; reverting back to the earlier topics, in topics in the news?

JOSS

Well judging from how much I've read newspapers and listened to the radio and television this week not very; but that's just the accident of having a broken radio and not getting out and getting newspapers because I've been writing for this institution, but I am very interested though not equally interested in all of them.

INTERVIEWER

Yes, would you say you are well informed?

JOSS

Not particularly.

INTERVIEWER

Do you think you could make yourself more informed?

JOSS

Oh yes.

INTERVIEWER

Yes.

JOSS

yeah, sometimes I wish that I could leave this job and go to where the action is if you know what I mean; um . . I don't mean an ex officio post in the cabinet I mean more like journalism, the media because that is where politics is being made in practice um . .

INTERVIEWER

You wouldn't like for example to teach in the university of Ulster? where you might be in the middle of things.

JOSS

I wouldn't necessarily be in the middle of things, I'm supposed to go to Belfast and give a lecture next April at Queen's college

and um . . I mean I shall drop out of the sky I shall go right back up from whence I came, I won't have to get involved at all. But it is an exciting prospect I suppose um.. of a rather daunting prospect of coming that close to the troubles and if I felt politically well enough informed and adept I think I would take on a post or a temporary post in Ulster as a challenge. But at the moment I find it more daunting because I'm not informed. If I were going over there to lecture on sort of Charles Darwin and the Irish question which is a feasible lecture I suppose I could very well be writing it now I suppose. I would find that exciting because I would be saying things in a political way and in a political context about someone whose um centenary of whose death is coming up; but I'm not in fact, I'm not going and addressing myself to what is happening there at all next April.

INTERVIEWER

O.K. THEN THANKS VERY MUCH JOSS.

T R A N S C R I P T 12Interview with LancePOLANDINTERVIEWER

Right then Lance, how do you see the situation in Poland at the present time?

LANCE

Um. Poland, I should say myself that it is inevitable that it is a transforma . . . a transitional period they're going through, and though the West may be over critical about it in the end it may be more powerful and more successful and therefore, if that is so, therefore it could be a bigger threat to the ideas of capitalism and I think that this is inevitable now, that this is going through a transitional period and it is evolving and um. . . it might well come out to be very successful in the end, especially if they have free speech and they can elect their leaders, so forth and so on, and the working class, even now can decide their destiny through a socialist government, so therefore, I think that this is a good thing that is going on.

INTERVIEWER

Yes.

LANCE

Yes definitely, yes I think this is great and um . . . I see it will happen, and um . . . not only there but in the eastern bloc as a whole, it's inevitable.

INTERVIEWER

Is it?

LANCE

Yes I'm certain of it, and um it might well come out they are a far stronger and a happier people, oh yes definitely.

INTERVIEWER

Would you say that the history of the country is important in this?

LANCE

Well, certainly, I mean they talk about Poland, all you've got to ask yourself when you look at Poland, look at where it's situated geographically, it's a . . . as Hitler said "it was a bastard country" really, it's stuck between two

major powers the Soviet Union and Germany and um .. then if you go on to look at the history, what was it? it was feudalism prior to the second world war, Counts and Countesses and all this old rubbish, and very feudal and people regret this, I notice today they have car factories, tractor factories, the Lenin steel mills, well all this must have been built under the communist state, and they had none of that, and I see they're quite an industrial country today, and I take hope for Poland, I believe that not only in Poland, but in other places it is inevitable that it will happen Russia will still be in the dark age, this will evolve and I don't think that they are basically rejecting the basic principles of socialism and I think they'll come out of it far more strongly and a happier people and um . . . once it's been more democrat the powers in Poland, I think that's what will happen, yes. So it's hope, in fact it could be hope for the whole world, because if they can show us that you can have a socialist state with democratic democracy really thriving and that people can decide who their leaders are going to be, and sack them if they're incompetent and um , I think this is a ray of hope for a lot of us. Yes, not only just the Poles.

INTERVIEWER

What about the religion of the country?

LANCE

Well that's the other thing about Poland, when I've looked at it, I realise that it is predominantly of catholicism, and I've noticed wherever catholicism has been predominant that it seems to have kept the people down in poverty and ignorance, wherever you look at it in the world where they are predominant, it is such, and um . . . I personally myself as an atheist have no time for them, so therefore, this also is a very difficult problem when you create a socialist state with them being of a strong catholic faith, but maybe in the final analysis that they can come to accommodation with one another and um . . . change the basic concepts of Marxism and christianity when they find that they have a common goal, you know; I think this could happen, but of

course it's very difficult if you have a . . . such um . . . I'd just say um . . . where catholicism is so entrenched, which obviously it is in Poland, therefore, it makes it more difficult surely to create the socialist state, so this is the way I see it.

INTERVIEWER

Um . . . do you think that the Polish Pope is going to be influential?

LANCE

Well I , obviously he is influential in Poland by the fact that he is a Pole, you know. But um . . . and it's obvious to me that the state is meddling in the affairs of Poland - the church there I would say. They always have throughout history and I can't see how they all of a sudden have you know changed course and I should say myself that he certainly has had an influence on Poland and its people, but um . . . this still don't deter me from the fact that I believe that socialism is the only hope we have of having a political entity that will basically work. Because you see all of the other systems we've had are completely hopeless, and um. . . and I think that they should have been abolished a long time ago, so therefore, I see that what could evolve in Poland, or I hope will evolve in Poland would be a christian socialist society and um . . . it could be of great hope for all of us, not just the Poles, this is the way I see this thing, you know I don't see it as um . . . I see it as hope - what's going on there.

INTERVIEWER

Yes. Do you think the unions will play an important role? in this new set up?

LANCE

Yes I think they will but, my argument has always been that the unions and the capitalist society and a social society, surely the unions will serve two different functions because a union in a capitalist society - it stands between the labour and the capital, well if the workers, at least in theory, have taken control, or **have** control of the means of production, so therefore, they are the capitalists en masse therefore, I see the unions as performing a different role

as to what they do now, and um . . so I see . . obviously they have a role I think to perform, there's no doubt about that and um . . they can no doubt, have a tremendous responsibility towards the state, but for example: I see in this country where some are saying. . it seems to be regardless of who is in power, they try to get the utmost for their members, and I sometimes question that - as to whether that is correct and um . . what about other people besides their members you know, and um . . I think that the unions in a socialist society would have a different function altogether to perform entirely from the way it's done here. And um . . I'm very shall I say 'suspicious' of a lot of the unions in the capitalist system however, and I'm very suspicious of them and I see that they have put them into the House of Lords and made them Sirs and all that, and this seems as if the system has kind of bought them off, but regarding in Poland, I think they're carrying it a spearhead in a different direction altogether, and I think that this could be a marking point in history and whereas the unions are taking, will may be in the end enrich communism and really make it work. I think this might well happen and as I say while the critics in the West are on about it they may well look out that they don't come out far stronger, and the other thing that I also noticed about Poland is they have tremendous credits from the western world, and therefore, if they would when they dealt with the devils - as they say you need a bloody big spoon to deal with the devil and by having all this credit, did they therefore then dealing with the capitalist or the capitalist west, then did they inherit the capitalist problems of inflation and did this not help to accelerate what they've got now, because I can't basically see that if people are well fed, clothed and housed and they're not basically going on the streets and bloody well making revolutions, so there must be a lot to the reasons why they do it, you see, so I think there are lots of things one has to look at when you look at Poland besides its history in general before you can at least try and make a clearer object-

ive to what is happening, but um. . there's no doubt about it, it appears to me that the West have let them have millions and millions of pounds and um . . and all the interest and all the other rigmarole that goes with that and um. . so therefore, have they not, therefore inherited a lot of the Western problems that come with capital from the west, you see so um . . and um . . I'm often wondering about that and is not the media in this country, because the capitalist system in the West is very precarious now in this moment of history, it don't know where it's going, it's getting more and more at a crisis and are they not using this to say to us, at least sub-consciously "now look if you try socialism, look what happens in Poland" but this does not deter me in any shape or form, I'm still convinced of socialism and the basic concepts of Marx. Because I believe it to be logic, and I believe it's like two and two is four and if you argue with that, you're a bloody fool, I believe this. .. I think this is the next stage of their history and we've got to make it work, we're imaginative, we have genius in the human race, we have skills and we must make it work, else we don't survive and I'm determined to survive and we must all make it work, that's rather than have the muddle we've got now. O.K.

VIOLENCE ON T.V.

INTERVIEWER

Right thanks Lance, to change the subject, have you got any views about violence on television and in television programmes?

LANCE

Yes I'm strictly against it in every shape or form, if I had my way I would have none of that shown whatsoever.

INTERVIEWER

Yes, I see, do you watch programmes such as Kojak and the Professionals?

LANCE

No I'm bored to tears with it, I switch it all off, I wouldn't waste my electricity on it actually, and if I had my way If I had any political power I would ban it

I'd ban all that, that's rubbish to me completely and I consider that the essence of television as a whole is to enlighten people and educate them, that should be the basic creed of it because what a golden opportunity we have through the mass media to be able to educate people and um . . . give them access to culture, because a person who can't read or write could listen to a beautiful symphony concert on there, or could have things explained to them,³ and I'm not saying that they don't need comedy now and again because we all want cheering up regardless of what systems we live under, but I'm against all forms of violence that are shown on T.V. in every way and I think they've got a lot to answer for.

INTERVIEWER

Yes.

LANCE

And I also think that the commercials are very degrading to the human race, that they keep on putting this over twenty four hours a day, I find this degrading, I find it repulsive if anything, to intelligent human beings.

INTERVIEWER

Would you say such sports as boxing and wrestling are tantamount to fringe violence?

LANCE

UM . . . yes I probably would yes, I would say they are definitely border line, it's all border line and of course, sports today, at least in our system, which is the only one I can really talk about, having that I live in it, it's money, money, money and greed, greed, greed and less and less sport and more and more money comes into the position and it's terrible what people will do for money and I'm sure we always have evidence of that on television all the time and um . . . but I would definitely ban any form of violence and um . . . or definitely would do those. But I would also like to use T.V. to remind people of the scourge of Hitler and of what people like that's liable to do if they ever get to power because the younger generation have no experience of it, but just to. . . I think it's an excellent

thing to still give people conducted tours of the um Auswitch and these places where Hitler mass exterminated people. I think that's a good thing, just to show them what can happen and how low the human race can go, but violence - beating up people on television and all the rest, I think that's abhorrent to the um to me yes.

INTERVIEWER

Would you say that the violence in television programmes and sort of fringe violence in the form of boxing is a contributory factor to violence in the home and families?

LANCE

Oh I definitely think that if younger people are seeing violence every day on T.V. from the most early age I think there's no doubt about it, it can have an effect upon them to become violent to a degree, I'm certain of that and that's another reason why I would ban it, I would not allow this to be put over to the people and um . . . that's definite yes, it definitely helps to um. . . how can I put it?

INTERVIEWER

You envisage some form of censorship?

LANCE

Yes I do very much so yes, yes.

INTERVIEWER

But who would the people be on a censorship board?

LANCE

Well it would be representatives of the masses, of the people and of the masses as a whole. I definitely would not have violence put over on the mass media, definitely not.

ALLOONING/SOLAR
ENERGY

INTERVIEWER

O.K. right in August I think it was a fellow crossed the channel using a balloon and solar energy, I don't know if you read about this in the newspapers or saw it, and he did it in a fairly short time about two and a half hours or something. Do you see ballooning as a form of travel in the future?

LANCE

Um . . well why not? Um . . if the energy resources as we have known at the present moment, unless we have some revolutionary breakthrough in technology hitherto unknown, so as we look at the position right now, there's no doubt we will have to turn to other sources of energy and also, for the um . . because the present forms of energy are polluting the world and anything like that, if it does not pollute the air and it still gets you from A to B I think could be an excellent thing and I think that like the balloon that will be a contributory factor towards it so therefore, I'd say they are a very good thing.

INTERVIEWER

Do you see any difficulties though, using various air passages and some form of sort of air congestion which might ensue from balloon travel?

LANCE

It's possible, yes possible yes, yes, but as I say, I think it's an excellent thing and if they can develop it, anything that can make the air cleaner, less noisy, and still can convey us from A to B I think is a very good thing, oh yes I think that's a good thing yes.

INTERVIEWER

I expect you've heard to about solar heating projects.

LANCE

Yes I think that's another very excellent thing, I would advocate that research goes on that to the utmost.

INTERVIEWER

I mean would you for example: advocate having your cottage here heated by solar energy technology?

LANCE

Yes I think that would be a good thing, yes I think it would be an excellent thing and um . . but how I see that will be taking place as new bills come into operation, if we ever have a government that's more scientific and as I would like to see a socialist government, we'll have that written into a law, that when they build houses - with that will go the solar energy automatically, it won't be a question of how much profit will they make, it will be a question of what use this is going to be to the nation as a whole and therefore, I would see that

could be done with a . . . in Parliament whereby as a house is built so as much as you put sewage and the rest in in will go the solar energy, you know for the future, once they've developed it better you know. I see this as a thing of the future and it will be built automatically into a house.

INTERVIEWER

Obviously we, one couldn't use solar heating as the sole form of heating in your house because of course, we don't get enough sun, so would you think it will be cost effective in the long run?

LANCE

Well trouble is you see, our minds are so geared in the sort of society that we live in to profit, profit, profit and I think that our whole psychology and our whole form of thinking has got to change and has to change in order to survive we've got to start thinking what is practical, what is good for the country as a whole and rather than thinking that um. . . what money we are going to make out of it and so therefore I see that it won't just be solar energy, there will be other forms of power because technology is making tremendous advances and I could see that solar energy and the wind, all these different things now, from the water and the sea will be contributing factors and I don't just see it will be one thing and um . . . it will help us to solve this energy crisis and at the same time be able to resolve the problem of pollution, which I think is very dangerous and therefore, I see all these things as just . . . I see a collection of things that will resolve the problem of our energy you know and this is just one of them. Yes but don't forget you see, technology as such, maybe in a year, two years, five years may be some chap, just out in the back garden, just lives like me, somewhere in an old shed he may have a technical breakthrough with something which will be the ideal, so you see you must keep all your options open about it, keep your mind open about it.

THIRD WORLD

INTERVIEWER

How do you see the development of the third world politically and economically?

LANCE

Yes the third world now that's interesting, I see the third world finally deciding the destiny of the world - the fate of the world.

INTERVIEWER

Do you?

LANCE

Yes definitely, that's definite. The third world now, we are a third, the two thirds they represent - therefore they are the bulk of humanity and I understand they're in dire poverty, misery and everything that I find abhorrent to me and dying of malnutrition every day and um . . this has got to come to an end. Now they're in the majority in the world, they still hold the keys to a great deal of the raw materials, now I see it like this: the capitalist society has so geared them, that they have been able to get their raw materials cheap, any product they export is always tied to the London market, or the New York stock exchange, now one way where I could see the third world beat the west was for instance with oil, there was a struggle, now they've come on top because our industries are so geared to oil and our cars and transportation, if you like they've had them by the goolies, and they can turn round and say "you're now going to pay this" now if and when the third world could suddenly tie up the copper industry and all the other things that they send to the western powers, then I can see that this would be a major change in the shift in the balance of the world, and also I see it like this-- it is surely that the third world, it is inevitable at some time that they must go for socialism and in fact a great deal are already struggling to do this and so therefore if they are in the majority and the way I see it is like this: here we have got. . . here's the Soviet bloc whether we like it or not are already in that pursuit, it's just a question whether we like the way that they are doing it, but they're on that road. Now if you take a great deal of the third world are going to go in some Marxist direction therefore, I see the western world being isolated

off, in fact I see them already being isolated off, and they're beginning to see. . . to tell them to solve their problems like we did in England in our way, I think is insulting to them and it's like the black man said once, "when the white man came here, he had the bible and we had the land, now he's got the land and we've got his bible" and I think the whole basis of the west has been the exploitation of those other countries. To me that is an undeniable fact of history and this has got to change and change pretty quickly and we . . . if we could get rid of the um . . . armament programme and the massive money and resources poured into the third world and then in turn that they. . . then the world trade would get going again and so therefore, as much as they think they need us - we need them very much and this thing is not going to work without them, so therefore, there has to be radical thinking regarding the third world and this is within this decade this has got to happen.

INTERVIEWER

You reckon?

LANCE

Yes positive, oh yes positive about that yes. oh yes that's definite because if not, we're going to be completely isolated off from them and more and more they are going to turn to the east for their technical development and everything else, and it's already happening in various places, and we can no longer dictate and continue to dictate and so if this is not forthcoming to them, then there is no doubt, that as the east becomes more powerful, especially economically, they will turn to them, that is definite. So there you see what the position is I'm stating, but they are going to decide the fate of the world as far as I'm concerned, the third world, whichever way they're going to jump that will be it, yes, that's the way I see that..

INTERVIEWER

You don't foresee any cultural differences?

LANCE

Well regarding cultural, I will quote to you now a man - Mohatman Ghandi, Ghandi said " let all cultures flow through my house but, don't destroy mine". Now I think that's a

pretty good one - let all cultures flow through my house, but don't destroy mine. So um um . . .

INTERVIEWER

In other words, maintain your own culture but obviously have an appreciation of others.

LANCE

That's right, that's right yes, yes. You see I kind of think that the whole of the human race and now we're talking about the masses - we're talking about now the working class if you like, who are the mass whether you like it or not - the ordinary toilers in the field, the ordinary people, now if they are ever allowed to get together, surely they've all got the same thing in common, they want enough to eat, a place to live and so forth and so on and if they can ever get organised and come together then the politicians who run the world had better look out, that's the way I see it, they'd better look out, now at sometime they will come together and I see, I take great hope in it really and surely that the this country has been very tolerant to let a lot of people to come into it, and has that not enriched us, you know it's enriched us very considerably, technically and culturally and other ways and I definitely think that regarding the third world that I foresee as I said to you now that I think that they will decide the fate of the world, whichever way they are going to swing, and I see them going politically to socialism, and if they do then we're going to be damn well isolated off, we will be isolated off in ten years, and so the writings on the wall now unless you're stupid. So then if you can't beat them, you'll have to join them, so that's the way I see that, and something radically, radical policy has begun toward the third world, because the way it's all going now with their population explosion and there are a lot of reasons for that because you see they've still got no technology, so the only way he sees the ready energy to work on his patch of land is through his kids, he sees development like that, and um . . . I blame religion for a lot of the problems in the world, you

take like in India, I think there is over a hundred different sects and religions and where the Hindu is holy and the cow is allowed to go and shit on the cabbages and all that, they should kill the cow and eat and have some meat form it, you know what I mean? so I blame religion for a lot of the problems in the world, but as I say the only hope I see for the world one day somewhere, is socialism world wide, and it has to be world wide in order to make it work, it will have to be world wide and there will be hope for us and hope for the third world then if that can come about.

INTERVIEWER

Do you think organisations like Christian Aid and Oxfam are very effective?

LANCE

No I don't, I think it's like pissing in the sea, I think they're wasting their time. I think they're wasting their time, personally myself and um . . . they're not going to change the world. The only form we have of making action, that I can see, is politically - I admit we are political animals and given political power you can do things. It's like coming along and a chap says to you, "I'm hungry" you say "well I'll pray for you my son" or do you dip into your pocket and give him ten quid and say "for Christ's sake go and get something to eat" now which is the way to do it? So that's the way I see it, it's . . . we've had enough of this talk and these do-gooders, we've got to bloody get on with it, we've got to get on now and pull up our socks world wide, and so that's the way I see it. So I see the choices, this is not going to resolve the problem it's of such a magnitude, all our western aid, what we're giving away, because it's such a magnitude - the problems of the world and the third world it has got to be done by governments, and it's got to be done en masse. That's the way I see it.

INTERVIEWER

So you've got to get the governments of the world in a team with one another?

LANCE

Oh yes very much so yes definitely or else we're not going to

get anywhere.

INTERVIEWER

But this may well take longer than ten years.

LANCE

It may, but it depends, a lot of that will depend on how things go in the western world, if our . . if we continue to decline and get more and more into a morass, and let's face it, we're in crisis, we're going now from crisis to crisis, capitalism is, it's in crisis and who knows, we might therefore, the way I see history; nature changes don't come until they're ready, till all the ingredients is right and um . . . who knows we might have a different form of government in the western world within ten years and um . . . where we can get on with some more - with new policies that we have hitherto never done, and try different forms of economic policies towards socialism, which I think will be the way it will go, if we are to survive. So I see the whole keystone to all of this I think for our survival now as far as I'm concerned is that we must go to socialism - in that we must have a planned economy, we must go to, then we must take that to a world economy - planned on a world economy um . . it will have to happen if we are going to survive, because who has the raw materials in the earth, they're not always going to be there, so who's going to have them, where are they going to go, and therefore, there will have to be a more equal distribution of the wealth in the world as a whole, to nation to nation, and my only hope that I can see for the human race if it is to survive, for what that matters in the but if it is to survive, it has to in my opinion, go towards some radical form of socialism. That's how I feel about that, and if it doesn't then I don't think it is going to survive.

HUNGER STRIKERS

INTERVIEWER

O.K. then to change the subject, I expect you read about the hunger strike in the Maze prison in Belfast, and ultimately

of course, the hunger strikers backed down after ten hunger strikers, in actual fact committed suicide, do you think they achieved anything by going on hunger strike, I mean they were really claiming for political status?

LANCE

Yes I do. yes you see I. Look all this history, the irrest-able part of history - now I foresee in the future (in the near future, not the far future) they will be looked upon as heroes of the human race, those men or women, they will, and as much as the British government and all the rest scream "terrorist" that's a load of bullshit to me. I'll just give you an example of how history does. We had Cyprus, we had a guerilla leader he was called Grivas, and I have heard people say how they would like to get hold of him, and what the British would do to him and what they wouldn't do to them, that Makarios and all the rest. Then finally a political solution had to be found and was found and what did you see? the next thing Makarios was having tea with the Queen you see. So therefore, regarding Northern Ireland, this is merely the demise of empire as far as I'm concerned, it's one of the last few vestiges of the British Empire and I see these as - they're great men in my eyes, these men who died for that ideal, there's no doubt they've died for it, and they are great men in my eyes and in history I see that they will be in folk lore in history those men and definitely they achieved something by dying like that for the very fact that their names will live in history, I can see that; and also it has brought a great attention to the rest of the world that if a man is prepared to die for something he believes in - my god then that's um . . . how many people in our society would die for an ideal you know. So therefore, Oh yes there's not in vain - no definitely not, no I see these as not in vain at all and as I say, I see them as historically they'll be in folklore and in history.

INTERVIEWER

It wasn't just a political struggle, it was a religious one as well. So how do you overcome those sort of difficulties?

LANCE

In Northern Ireland?

INTERVIEWER

Yes.

LANCE

Well I wonder if it is you see, you see, the thing is you see, I ask myself, where am I to get information from, where am I able to get this information, I am quite convinced till the day I die that the British media is all biased and um. . most of it is biased and a great deal of propaganda with it. I'm convinced of that, by just listening to it and, maybe the last thing on earth they want to tell us is the truth, it's all what they want put over, it is what is politically expedient for them at a given moment and um. Is it so much with the church, I have heard people say that the provisional I.R.A. that is the political wing of it, if and when they kick the British out they're going to turn around and fix the church, you see so you see what I am trying to say, and surely Northern Ireland, I understand has more unemployment than in any other part of the British Isles at this moment of time and so, there's no doubt about it the Catholics were treated as a minority, the Ulster people have treated them like a lot of trash, and when they had demanded civil rights and a bit more equality, it was too late the horse had left the stable, so um . . and I must admit to a degree I have sympathy with the I.R.A. there's no doubt about it, I have sympathy with them because having read Irish history you know having read it and digested it, I think that they have a just cause Oh definitely I think they have a just cause yes, yes, and I predict that the British will have to get out of Northern Ireland.

INTERVIEWER

When?

LANCE

Oh I would say within a decade now they will have left, yes they will have left and the Irish will get on and solve their own affairs they'll have to because if that's not an iron

curtain along the border of Northern Ireland and the South there's an iron curtain created by us and Ireland is an Island will have to be one entity and the Irish will have to resolve their own problems and I think once we get our finger out of the pie it will be easier to do..

INTERVIEWER

O.K. then Lance, I'm just going to turn over the tape at this point. Right then Lance to turn to a different subject altogether, can you tell me about your hobbies or pastimes which are apart from your leather work which really turn you on and you really get involved with?

LANCE

Yes I'm well I find as I develop you know mentally if you like, I have a varied interests, I love literature, I've found that I have a natural hankering for the culture in general, I couldn't imagine my life without it it wouldn't be much good to me, and I've found living up here where I do on Bodmin Moores I've found that I love stone and working with it, granite which has an abundance of it up here as you can see, I've been making granite walls and I find that I have an ability for landscaping out gardening and places and if I had my way you see I'd turn the whole world into a beautiful garden and then I have ability to wood carve, I find I can carve in wood and I feel for me which goes for, I feel should go for everybody, whatever I have got in my life to develop it to the fullest, as a human being, to develop it to it's utmost and the tragedy in life, is that so many will never have that chance to do that, and I believe that all human beings are basically intelligent, it's just a wuestion of edveloping that intelligence and um . . I find now that there is no limit to my ability to create, none whatsoever, it's just now to find the time and get on and do a lot, and it doesn't go for me, I don't feel that I'm unique, I believe that every human being - being a human being, must have potential, and it is all dictated by environmment, it was for me, and a lot of it was chance that I ever arrived where I did, but I had to give up so much, and the other thing is just that

people aren't prepared to make such sacrifices, and I don't know if I had to live my life over again that I would have done, you know and that's why I've always been very critical about my present society that I live in im. . I want to see a world where all human beings will be given the utmost assistance in their development in whatever that might be, and their creative forms you know.

INTERVIEWER

Do you think this would be possible though, under a socialist government?

LANCE

Yes definitely.

INTERVIEWER

How is a socialist state different from the state which we've got at the moment.

LANCE

Well I um . . the biggest asset of any country of anywhere must be its people in the final analysis surely. Say, where capitalism bases all its worth on what's on the financial index and all that old crap and um . . I mean what is wealth? I've asked myself what is wealth? well surely wealth first of all is the materials in the ground, and someone has got to have the skill to go and dig them up, so you've got the miner - he finally comes along and finally you get the tool maker then, who would make something of this, now that's wealth, not the bloody paper, not what the stockexchange is. What is wealth, that's what we ask ourselves. The wealth must be the skill, the creative ability of people - that is wealth. I mean, in the first place there was no gold, there was no stock exchange, but they were creative and making things, were they not? how did civilisation evolve? how did it go on? how did it start? In the beginning there was no stock exchange was there? and I should close up all the bloody stock exchanges in the world, I bloody well would, I'd turn them into something more useful for the people, and as I say um . . I know that I'm not unique in that, it's just that by time and place and chance (a lot of it was chance) that I had the opportunity for this development to where I have got to in this moment in time

and I've found that due to this development, I've found that I can build a house completely on my own, you know at one time I didn't know that and I find there is no limit, there's no limit to my potential. But um . . . I believe, or, I'd like to believe that if the human race ever has a democratic socialist system and as I have emphasised, it will have to be world wide and then with the advent of the silicone chip, I could take hope and say we may yet be in for a golden age, whereas, let the silicone chip mass produce all this um . . . a lot of this mass production and then they can, we will have a political system such where people can at alst do their own thing and find out what their abilities are, but there is definitely going to have to be a major change in the social and economic way of doing things, but yet, this could still come about where a lot of people look at doom and gloom, we could be on the threshold yet of a golden age, we could be, and so there could be thousands of Lauri Smiths then - millions of them and um . . . this in itself surely would make a happier world.

INTERVIEWER

Yes how do you set about developing um . . . for example: your leather craft industry?

LANCE

Well as you know, I went to prison and got a ten year sentence in Canada and um . . . this what I thought was the greatest adversity was going to turn out to be the greatest thing that was going to happen in my life, and of course, at last, although I had travelled world wide as a soldier and in the Merchant Navy as a steward on a boat, at last when I came here to prison, I had a chance to study in depth and at last I was going to stand still, whether I liked it or not, I was there fore a long time and this was when I realised. . . it was in prison where I realised that I had the capabilities of doing something you know artistic and my medium was going to be leather, so if you like it was only by coming to prison that I was able to discover this, so this is how the key turned for me and that was really in the end going to put me on the road to great discoveries and lots of directions. Because you realise that once you've

turned the key you can then turn many keys, you know different directions of enquiry or, and in the realm of art in general. So that's what happened - the key thing in my life was prison and that's how it happened for me.

INTERVIEWER

Yes, but obviously you didn't discover your abilities to work in granite and stone though?

LANCE

No, that's come since I've been on Bodmin Moors with bundles of stone around me, it's got to affect you whether you like it or not and um . . when it happens, it's like a pebble falling on the water, once you've got one ring of water going then many can . . um many things can take place you see.

INTERVIEWER

Did you in actual fact have to design your own instruments and tools?

LANCE

A lot of is yes, yes I've worked that out myself and of course, at last after my world travels and living here on the moor, with to me a beautiful environment and the peace that I have, I was able to set my mind to lots of different problems and um . . creative ability, and discover different things about myself, having now got out of the rat-race, and this is what is going to help me very considerably.

INTERVIEWER

So you think inner peace is very important to developing one's full potential in the arts and crafts.

LANCE

Yes definitely and lack of harassment, and I see a lot of people, as much as they like say "Oh when I retire I'll do something in wood or something" by the time he has raised his family and got his mortgage off his back and etc., what is he 55 to 60? well what major contribution can he give to art, he might make lampshades or something like that, but to me that's not good enough, if he had that desire to do woodwork when he was 18 or 19 then that's when he should have been able or allowed to develop that and so that's the

way I see that you see. Surely what is life all about, we've got to get out the bloody caves and work is not to be our master - we're to be the master of the bloody work. Put a lot of this boring repetition and that stuff behind us and go to the arts, this is what I see as the banquet to life in the arts, this will bring great happiness to mankind and fulfilment, but at the present moment of course, it's only been the minority that has had the access to them.

ADVICE TO SOMEONE
GETTING MARRIED

INTERVIEWER

Right to change the subject Lance, have you got any advice for someone getting married?

LANCE

Any advice well . .

INTERVIEWER

What are your recipes for marriage, you're not married yourself are you?

LANCE

No, well first of all, what I would say myself regarding marriage, it's a very good point, it this, I would say to the young people, and that's who matters more than anything, they're the future whether I like it or not, I recede to the background and I say to them "you have No future" and I say that with a capital N you have no future in this present political system and the sooner you either kick it in, change it, the sooner you get on with it. Now that is, they are to take authority on now - a major task, another one - the preservation of the human race - to get rid of the nuclear stuff, that's the main problem there, and then regarding marriage, well to have marriage you need a house, you need a home, you need a job right. So therefore, if they are contemplating marriage the first thing they've got to do really, they've got to sort this out politically and economically in order to have a chance to have a successful marriage, because with that, if you can take a wife and have children, you want a home for them, you want money coming in, you want a job

but um . . . I personally myself think marriage is probably an over-rated thing, I don't know,

INTERVIEWER

Do you still believe in the institution of marriage as opposed to living together?

LANCE

Yes I think myself that um . . . because you've got a written document stating that you are married, that's not going to give you eternal bliss, on the contrary, and I still question what you mean by marriage, maybe in the future you'll have a contract written out with a solicitor and that will be the form of marriage from a legal point of view. I see as it has been, I see major changes taking place there, this don't fulfil the role for the people any more as we have been so brought up to believe, you know. It's a concept that has to be re-examined like a lot of other things, that might well be old wives tales, that they don't hold any good in the twentieth century, I mean surely the whole concept of the human race is be happy and this is how I determine success, are you happy? you're either happy or you're not happy, and I suppose marriage, I look upon marriage, it could be great sexual fulfilment which we all need in one form or the other and of course, what do they mean by love, that's a question I would ask myself today what do you mean by you love that person? or you love that . . . I mean are you saying 'I fancy that person for a little while' I look upon it as a very serious matter and not to be tampered with lightly in any shape or form, when you're young and inexperienced you do, but it's not to be tampered with, and maybe a lot of this old guff about marriage and everything and love has been created by a lot of the arts, poets and musicians and all the rest of it, but I think we've got to examine this in a more scientific perspective and I think that the concepts we have had about marriage will completely change by the end of the twentieth century because even women themselves are rebelling against it in its present forms and you know I think myself that if two people come together

and can generally respect the views of one another, and can grow together then I think that could be a wonderful thing, but I mean when you look around society, how many of it does. I mean there's more and more break ups going on than there has ever been in our history at the present moment and um . . so therefore, I see it as just a big area that has to be re-examined thoroughly in general you know, and um . . I'm not against marriage and I think that if you are lucky enough (if you can call it that word) to find a partner that you can truly be compatible with and want to share the rest of your life with, then I think that could be a very wonderful thing. But I should say it's not to be tampered with lightly in any shape or form. That's what I see. So I treat it with a big respect and that's how I feel about it at the present moment and if somebody wants to have pre-marital relations, then I say "that's their own business" and their own affairs and maybe that relationships is for each of us according to how we see it and how we feel about it. Every relationship must be unique in itself you know that's the way I see that, you know what's good for one may not be good for the other and as I say, I mean the way I see history we are constantly changing our values, we have to as we go along and um . . maybe marriage will be thrown out of the window by the twentieth century - as we have known it, you know. That's not still so that people are going to come together and have children and all the rest, and I may see it . . I see it um . . it may be conducted in a hitherto different legal form to what we have known it today.

INTERVIEWER

You don't see it as necessary to get married in order to have children to form some form of security?

LANCE

No. What I do see with marriage though, the odd thing is that once the children come along if you just live together and don't go through any legal arrangements, but well then that involves more than just yourselves two people there is another life now involved and this is an area that

has to be questioned in great depth and um . . if that child is not going to receive love and affection and security, then god help the world because there's a lot already running around all mixed up. I am of the opinion that the first twelve years of your childhood is of major importance of you, to us and to the child and to the world because the reactions are I know in my own case about that, and so therefore, I um . . . I think it's um . . as I say I definitely think that the whole area is going to be - that we as people have got to re-examine that area in earnest in the very near future you know. But a very complicated one that what you've put to me and um .. very very complicated I should say and an area that I'm not quite sure of to be honest with you, but I think it's great, it appeals in my opinion, I like women, in fact I love them, you know being honest about it, I love their company and so forth and so on. But where it's found for me, for a person who was born from a working class in dire poverty, I knew that if I was going to take on a wife and have children, and then I would have a mortgage and the rest, so I would never have a chance to develop myself as an artist or to find out what I was good at. I realised that I couldn't have both, and so I found the conventional form of it was a hindrance to me, to my development really you know, so that's how I see about that.

MY JOB

INTERVIEWER

O.K. thanks Lance. the last topics I should like you to talk about is your job in actual fact, your leather making. I believe you've made, is it the bombard a particular sort of leather water jug or vessel for some place in Canada, perhaps you could tell me something about that?

LANCE

Yes well what has actually happened you see, I have got two leather crafts and they're distinct as chalk and cheese, though they are in leather they're two separate crafts, one is a modern craft if you like, in that I make these handbags belts and all that, you could call that a bread and butter craft, and then I have my ancient craft of mediaeval vessels. Now to get the record straight and so we'll put it straight,

we'll put it like this: what do you mean by bombard? what do you mean by mediaevil leather vessels, what do you mean by bombard and blackjack? Now we'll put it to you very quickly, we had the Norman conquest, and on their horses they had skins with water and wine, a hundred years after the conquest the English look at this and say " We can do better, why don't we drink out of leather" so they learn a process of hardening that leather to make it really solidly hard which is a mediaevil secret kept from father to son of the gills, and then they founded a form of lacquer that would seal it and now hence therefore, was to develop an elite piece of culture in the history of the world, never before or since man in my country was going to drink predominantly from leather, you'd be surprised how few Englishmen know that part of their history and when William Shakespeare was around in his plays he was writing about every day events which a lot of us have read, are hidden the following words: Bombard, Blackjack, Costell, Shakespeare himself was drinking from a Blackjack, that was a common drinking vessel. Now they were still drinking out of leather until about 1700, 1750. One might therefore, ask what put an end to it, it was only to the domination of pewter, and it wasn't made again until the advent of my life - the complete mastery of this craft again, it's taken me nineteen years and my god I've had to pay a price to learn it. So here is this craft all intact again on Bodmin Moors, so I cannot put that strong enough to you, so people you know, to put it to you, this is what has actually taken place and what will happen to the craft in the event of my death I don't know, it depends from now on how society reacts towards me. I don't think I am a selfish person, I've never wanted to adhere to that type of thing, I'd love to pass it on and give it to people and um therefore, I've got my two crafts you see, my ancient craft, the ancient mediaevil craft and my other craft, so that's . .

INTERVIEWER

Where did you actually learn to make them? Did you go back to Shakespeare?

LANCE

No from prison, which as you know was in Canada, I learnt the rudimentaries of how to carve leather there and of course, I

was doing other things. I had a job over there and I was going to school and I was studying, and reading everything I could possibly get from the library and when I came back from Canada I picked up a shovel, I had a shovel in my hand for a while and I thought I don't want this bloody shovel in my hand for the rest of my life, I'd best learn some more about that leather work, and it went on for years and years, I got a job in a bakery by day and learnt it by night, dug big holes, sewed up hard leather and from then on I had to learn all the rest completely on my own and um . . . till finally a chap told me that once in history they had these leather jugs, and it fired my imagination and I thought "well wouldn't that be marvelous if I could get back that ancient craft, and I thought god that would get me known" Of course, unknown to me, I thought I was going to do it in a few years, but it's took me years and years and years and I researched in the British Museum, there's a font at Oxon and Buckinghamshire and getting sacks and carrying them on sticks, poetry, um old documents, old books, castles and then finally I had to find it out either by logical conclusion or hit and miss, there's been a lot of hit and miss and finally I can truthfully say today that I have conquered that craft and that's here with me on Bodmin Moors.

INTERVIEWER

Have you in actual fact written it down in the form of a book?

LANCE

No.

INTERVIEWER

Do you foreSee yourself doing that?

LANCE

Well even now to me up here it's a question of time you know, I mean I've got to get my priorities right, what I like to do . . . I like to sculpture in leather you see and keep developing things, even to me although I live up here, it's a question of time and my priorities.

INTERVIEWER

So can you elaborate on the sort of job that you are going to send to Canada, which one was that?

LANCE

Yes this was the bombard, this was the . . . the bombard was used to convey the beer from the buttery, where they kept the butts of beer, more power to your elbow has come from lifting the eight gallons in the bombard. It's carried up on the shoulder and then conveyed to the long table where it was poured from the shoulder into the smaller vessels. It's called a bombard because when you hold it up it resembles an ancient castle that they used to bombard castles with an outwhizzer, now this particular jug with the Canadian coat of arms on is going into the Museum of Man which is their national museum in Ottawa, Canada, and of course this is away in a few days as you know, and this is of course to their National museum as a gift from me, because it was from Canada that I had my major break in Kingston Penitentiary, Ontario, so as a kind of a thank you, I am giving them this as a gift absolute from the British people.

INTERVIEWER

I think there is also a bombard in Shakespeare's birth place.

LANCE

Yes there is a bombard in Shakespeare's birth place, Stratford-upon-Avon, that's where the effigy of . . . Shakespeare's effigy is carved upon it and so it's the only one like it in the world and that was given as a gift absolute to them, and of course, then I have my work in Westminster Abbey, London, this is the water bougets, they were carried on the yoke, they were for the carrying of water through the narrow streets of London and the cities in the twelfth - thirteenth century, when the streets were only say two yards or very narrow. The sanitation was in the streets you therefore, had to convey drinking water to them, it was carried by men called the boug men B O U G, and this they carried on a yoke on a horse and there were three entities, with the yoke and the middleman - a guy with a hook that would take the water, all the kids knew them and would say "here comes the boug men" in the advent of the water pipes, which were made, they were tree trunks bored out with clay in the middle, they never made them again, and the only pair in the world today in my experience, are in Westminster Abbey

made by me which was given to the abbey, and then my work was also at the Northampton Museum which I recently, it was in Northampton . . and gave a military leathern bowl to the leather museum in Northampton.

INTERVIEWER

How many bombards have you in actual fact made, Lance?

LANCE

Yes I would say a total of eight yes, that's the biggest of the vessels of course, about eight yes.

INTERVIEWER

And they're sold for what? five hundred did you say?

LANCE

Yes it is five, they've got to be five hundred pound yes.

INTERVIEWER

And they're valued at one thousand five did you say

LANCE

Yes you can say a thousand pound because you can say a thousand, it's got to be a thousand pound you know yes.

INTERVIEWER

How did you get commissioned for the work in the Abbey then?

LANCE

Well it's a build up of events you see. I'd . . I was on I.T.V. and they picked me up at Stratford-upon-Avon and they told me they were interested in me, they were the people who told me that most of the other vessels were mentioned in his plays - the bombard, costel, blackjack and all that, and they were interested enough to purchase the collection of my work, to have in Shakespeare's birth place, and of course then things get around as you know, and finally I got in touch with the Dean of Westminster Abbey and through the good offices of somebody else and . . one thing led to another until finally I gave them, um . . presented them with a pair of them into the jurisdiction of the chambers of Westminster Abbey which was given to the nation, yes.

INTERVIEWER

Have you done any work with glass at all?

LANCE

No I haven't no, not to say that I haven't got a deep appreciation of glass, whether it's the diamond cut in lead or, stain

I'm very fond of it yes.

INTERVIEWER

And I do believe to, that reverting back to your leather work that all the belts are fairly unique aren't they?

LANCE

Yes, it's all hand carved you see and um . . . I can make a hunting or fishing scene or whatever you want and carry out personally for you and um . . . all my work I believe to be unique, it's a part of me so it must be unique, it's a bit of me because every human being is unique is he not? so there you are.

INTERVIEWER

And how did you come to adopt the sign of the toadstool.

LANCE

My grandfather's name was Edward Hurst and he was a famous herbalist and inventor and if you checked him out, you'd be surprised at how much he did invent you know.

INTERVIEWER

In what respect?

LANCE

In the realm of medicine and herbs and I know, I don't know . I know for a fact that he made lots of different fire grates which he made at his own forge which were mass produced in Birmingham, Edwardian fire places and different things and I don't know half of it but I know there was a hell of a lot of stuff he invented and the toadstool being a fungi, which he was working with, on the fungi, and so I thought I'd use that in his memory, and it's unobtrusive and I can even hide it in my work.

INTERVIEWER

Yes so the ancient leatherwork that you do~~n~~ and the modern leather work has it all got this sign?

LANCE

All got a toadstool on yes.

INTERVIEWER

And Lance as well?

LANCE

No not necessarily Lance , that goes on to my belts my name Lance and a toadstool, but on the vessels,

HOW INTERESTED ARE
YOU IN CURRENT AFFAIRS

invariably I just put the toadstool and date of when I made it.

INTERVIEWER

And date it yes, O.K. thank you Lance. Reverting back to the news topics in the news now, how interested are you in current affairs, would you say?

LANCE

I'm very interested in current affairs, I love all . . I like Panorama, I like all those, Weekend World, I love all them because as you know I'm a searcher and I want to get at truth whatever that is. I'm a searcher of truth and god alone knows it's difficult to get at it. I listen to all that they say, and then I will equate it and make up my own mind about different things you know, but I'm very interested in what's going in the world and what's going on around me, very interested and that's with a capital V.

INTERVIEWER

How informed would you say you are Lance?

LANCE

Well I would say pretty well informed in a way because all the visitors who come to see me all over the world. We don't just sell and purchase leather work, I ask them about what is going on in their countries economically, politically and all the different people who come to see me is a blessing in a way because they keep me in touch a lot with what is going on in their towns and places yes.

INTERVIEWER

Do you read many newspapers?

LANCE

No I don't no, I don't read no newspapers, we don't have them. I've got a television set and other than that we don't bother, don't bother with newspapers.

INTERVIEWER

So does most of your information come from people that you meet or from your own reading?

LANCE

Um . . from people we meet or our own reading, our own reading yes, I've tried to build my own library as you can see

with different books, I'm very proud of my books and I don't .
I'm only interested in books of things that's happened, just
fact of the world, I haven't got time to read fiction you know,
I haven't got the time.

INTERVIEWER

So you're more perhaps . . you listen to what people's
opinions are about certain things and you obviously look
at the television quite a bit and it's probably from that and
from your own life experiences is it.

LANCE

Yes yes, that's right yes.

INTERVIEWER

O.K. then Lance thanks very much indeed then.

T R A N S C R I P T 13Interview with MarkPOLAND

Interviewer "O.K., then Mark, what do you feel about the present situation in Poland at the moment?

Mark Well, I am not very well informed on the details of what's going on in Poland, and that's largely because I don't find very much point in following the details of these things. I am aware roughly, because I see other people's newspapers. Occasionally I read my own newspaper. I have not read a whole article on the published thing. But I have a sort of deep generalised anxiety about it, because it seems to me, it is a very, very tense situation, because ... because it follows a pattern and in general, when I see this kind of thing going on (that is, a conflict between some established system and some volume of dissent which has grown to the point of really becoming very significant) I am aware that these situations are potentially very explosive. So I know they are explosive.

I will tell you something right now, actually - you can cut the answer for a moment. I can actually feel a kind of pedantry in what I am saying now; I am not just talking to you like I was last time. I am looking at the microphone, I

am not looking at you; I am not feeling as relaxed. That's funny.

Interviewer

Yes. But we did discuss this before the interview last week because I said I had found that the microphone was very inhibiting with some of my subjects, and that was a point I was going to bring out in my write-up. But I have found (last week and certainly during this week - when I have been doing these fairly lengthy interviews) - that after the first five or ten minutes or so, people seem to settle down and don't actually notice the microphone.

Mark

Yes, I am sure that is so, yes - I'm sure that's so. It is just that I noticed it very suddenly because there was such a contrast with last time we chatted.

Interviewer

Yes and, as an interviewer, very aware of the recording levels.

Mark

Yes, so you have got an artificiality in mind all the time?

Interviewer

Yes, and if it drops below a certain point then I know I have got to increase the volume.

Mark

Right, well I will try. You see, the big problem I have got at present is that I do remember doing this before and the result of having done it before is that first of all, I feel slightly rehearsed and I don't like feeling rehearsed, and There is a quite definite difference. You see, the first time we went through, you were asking me about these things and

I was telling you - I was sort of 'responding' and then explaining why my answer was the sort of answer it was, and that kind of thing and, I felt I was just having a chat to you and I was telling you things about me, things about what I thought about things, and now, sitting here with you, I can't feel that you don't know those things now, because we went through them before; I remember saying these things to you, talking about the way I thought about things, and that sort of thing and I felt well: I was really telling you about it then. I don't really feel I'm telling you about it now, because I feel I've told you.

Interviewer

Yes, but in actual fact I have forgotten a lot of the content. I knew that the first few answers revolved around systems and processes.

Mark

Well, they always will because I tend to see I tend to see everything spun out of a fairly simple generative set of patterns.

Interviewer

Yes.

Mark

I think if you look at these there are a number of political things on this list. The hunger strike business and possibly others. I can't remember, but on the whole, I think that these are all questions of conflict. I mean, there is the question of violence on T.V., and this is a question of the degrees of conflict in society. And so I tend to see things largely I think that human conflict, actually, is a fairly intelligible

process. Whereas, it seems to me that most people don't. They are preoccupied with winning some particular conflict. They don't see in general that somebody who is aware of their constraints (the constraints on their actions), and is aware of the type of information available to them, will actually be able to see what they are going to do. Now, of course, they are aware of it to this extent, that they actually try to conceal information from each other in case people can predict what they are going to do. But the whole thing about conflict is that it is necessary for anybody engaged in a conflict to try to be secretive.

Interviewer

Yes.

Mark

And secretiveness I think, is an obstruction, a total obstruction of communication. Now it seems to me there is a difference. We use the word communication in society at present largely to mean any exchange of symbols.

Interviewer

Yes.

Mark

Now I don't, as it happens. I think there are two categories of the exchange of symbols within our society is disputation: people are trying to prove something, or disprove something, or persuade, or do something of this sort - rhetoric - I think rhetoric has nothing to do with communication; I think largely, it's kind of misuse of language. But it does have the effect, of course, that in the event that people proceed in these fashions, these rhetorical ways rather than understanding what

is going on with their communicational processes, then, the communicational processes will go wrong, and the phenomenon that will arise when their processes do go wrong will have the appearance of dispute, and they won't actually be able to resolve the disputes. They will continually be trying to do some kind of censorship, or delaying action, or just voyering their way out of disputes without changing anything fundamentally. And so consequently, you get procedural decisions, but these decisions are not actually acceded to by the people subject to them, because they simply can't accede to them. They may feel themselves forced to accede to them overtly, but they can't actually do so. I mean, if somebody is actually living in a state of deprivation and they find themselves talking to some slick bureaucrat who tells them either that they deserve to be, or that there's nothing that can be done about it or what-not, I mean they may accept some formal decision from him, but actually their state of deprivation - the degree to which they will be energised to actually try to change the situation can't be altered; you can't go on sweeping the much under the carpet indefinitely. But this tends to happen and people begin to argue about backlogs of disputes and this Polish thing is a perfect example. No doubt what has happened is that they have got themselves into progressively deadlocked committee structures and the like, and pricing schemes or whatever. If there is a bureaucratic procedure, it will be formalised (there will be rules about it, there will be questions of proper channels and that kind of thing) and in general, when there are complaints there will be an attempt to defuse the complaint, rather than look at

the system and see whether there is anything that can really be done about it, (largely because people live in a kind of muddle) and they always say 'Well we can't get on to anything now. That's not within our terms of reference. That would mean appealing to a higher committee or a higher authority', or something like that.) So that basically, there are demands for solution to problems within constraint-sets, that ensure that the problems can't be solved.

Interviewer

Yes.

Mark

No usually what happens there is, ultimately, this will either come to blows, or go to some level of suppressed dissent, or there may be some innovation which, for the time being, distracts people enough to make them think something is being done about the problem, but in fact, does very little, because it will generally be deadlocked as soon as it has started. And the problems underneath the sort of 'bureaucratic covers' world-wide, in every organisation, will go on growing.

The problem is that organisations haven't got any flexible response to this kind of thing. The very nature of an organisation is that the responses for each person at each level are prescribed by their job description or their limits of discretion, or what-not, and in general, there is very, very strong opposition to any individual in an organisation (or even any committee) having large discretionary powers, because it is seen as, basically, it is seen as a monopoly of power.

And, nearly all organisations are paranoid in the sense that people are obsessed with the mismanagement prospect (prospective mismanagement of the organisation), or its subversion, or its dissipation. Converting its funds to, say, entertainment accounts, rather than getting on and producing something - all these various things. Organisations actually are incredibly rigid. So their rigidity means that their responses are inept in situations; the ineptitude means that basically they are continually moving into problematic . . . more and more problematic zones for themselves; those problems give rise to dispute within the organisation; the rigidity of the organisation suppresses the dispute; ultimately it has to burst. Now it seems to me that this is going on in Poland. It is going on everywhere that I see an organisation; it may be at a different phase of that cycle, but people seem always to try and solve problems by starting another kind of organisation and trying to get a different sort of constitution and I don't think that will work. It is the very use of the constitution that is the trouble.

So when I look at the Polish situation, I see that it is one of these phenomena. No doubt, the Russians must be incredibly worried about it because it appears that what's happened is that the people on the ground (Solidarity and the workers) have reached a point where the usual palliatives, distractions and so on, can no longer work because the intensity of the problem is very great. I think they also are sensing that things are changing and they are probably very hopeful - some of the more naive people in Solidarity. But the Russians must

surely know that it is impossible to yield to this because of the destabilising effects that it will have, throughout the whole of their block. That is why I feel that this is a singularly nasty version of this. But I should say we have correspondingly nasty things in this country when you think of inner city problems and those kind of things. When crises come into synchrony there is going to be a big crises.

Interviewer

Yes.

Mark

And since organisations basically are systems for regenerating crisis, I think

Interviewer

But does this apply to political systems?

Mark

I would think, you know, every system is a political system in a sense. Wherever there is a question of arbitration of a dispute, then there is the question of who has the role of arbitrator and you find that the political dispute is the dispute about who shall arbitrate. The whole point about arbitration is that it is arbitrary. It doesn't work. Of course, people think it does work and they start pointing to cases in which it seems to work. But basically after all where the problem is one of suppression of information, misinformation because, you know, all these disputes are solved by some appeal to some criterion or other ultimately, possibly brute force, but in general word come first, the economic sanctions come second and violence comes third. Basically the risk escalation goes up as you move along that spectrum, and the cost goes

up. So on the whole, people will actually try to talk people off before they try to buy 'em off, and will try to buy 'em off before they try to fight them off.

But this is a simple economy thing.

Interviewer

Isn't it a question of bargains, as well?

Mark

Well in bargaining, the crucial thing is to deceive your opponet; it is a game of poker and what happens is that people try to present the strongest case. Now there is a ^rgreat deal of selection of evidence there and this will generally be pointed out; anybody who has a false case being presented against them feels pretty strongly about aspects that the other person is sliding over, or taking for granted, and will try to bring them up and therefore, the question of what is relevant and who arbitrates relevance, for example, is very important. It is always a question of swaying a jury, or swaying a constituency, or even swaying a particular individual, if that individual is in some kind of so-called decision-making status: you know, judges of appeal, directors being persuaded for one policy or against another in a company, or the university, with questions of bidding for research monies, that kind of thing; it is all basically propagandist ventures because you find that these things only occur in questions where there is not sufficient information. It is always accompanied with a great deal of secrecy; people must play their cards close to their chests; they mustn't let other people know about their

weaknesses. The degree of misinformation is really quite colossal. Hence the demand incidentally, for all the information processing stuff that we have.

Interviewer

Yes.

Mark

Basically, if you know that most of the information is scrambled or jammed or censored or what-not, then you just have to try to collect more and it seems to me the information explosion arises out of, very largely, out of this preoccupation with misdirection and secrecy and so-on. The result is that nobody has got a clue how anything works.

Interviewer

But the advisers to the Polish government would have clues, wouldn't they?

Mark

No, I don't think so. It seems fairly obvious that if you look at the world economies, that there are no economists who have the slightest understanding how economies work. When I say 'no' that is a bit sweeping. There are perhaps two or three making very cogent remarks, but in general they will be ignored by the majority, because the actual conceptual structure with which they work will be different. So on the whole, you find that people are put into positions of vulnerable authority, or possibly they may get into positions of popular authority - like television pundits - just because basically they have got some kind of line of appeal that sways a large number of people who know less. But the only person actually, who

can assess a person's competence is somebody who is at least as competent.

Interviewer

Yes.

Mark

Now people just don't know. People are informed by reports from sound sources, the question is: How do they select the sources? In general they will only select a source as being sound, if, on matters of fairly fundamental policy, that source is of the same persuasion as they are. There are expectations. There are things you know perfectly well. There are certain circumstances in which you can be sure somebody is telling the truth, even though he is not of the same persuasion, if you are sure enough that you have got enough frighteners on him; you see, this is what gives rise to torture. But you see, information extracted under torture is unsound anyway, because the victim is going to say anything he thinks will stop the torture and so your torturing doesn't extract valid information. But the whole question of validity is always a question of selection anyway. If I understand perfectly how something works (like a machine) then, if something goes wrong with it, I know what to look for. Diagnostic error testing and that kind of thing can be done on machines. But if there is something where I really don't know how it works, and I wish it worked in a different way, then there may be ways in which I can temporarily force it, but it has its own inner dynamics by which it will ultimately attempt to evade that forcing and people just don't understand each other's interdynamics. No politician is actually an expert on human nature. In fact you

will find they usually have an extremely simplistic view of human nature: you can't change it; it is greedy; it is aggressive; it's self-seeking; it's frightenable. In the society at large, we have no idea I mean: where we are ignorant about people's psychology (and the mere fact that we have (a) people who are supposed to be professional psychologists - which is amazing - because to be a person and to interact with other people you have got to be a psychologist - and if you are not going to be a competent one, you are bound to be an incompetent one -) and the fact that you actually have people who can be regarded by the populace at large as in some way experts on understanding people - which is all that psychology is - is very extraordinary. It means obviously, that the mass of people don't even pretend to understand people. Also, the other point about it is that there is no unanimity even amongst these alleged experts.

Now basically from this we infer that certainly in the society nobody understands human psychology and yet, of course, one finds that at the same time, people are incredibly rigidly attached to specific procedures for trying to affect people's behaviour. Now they are wrong. I think they are simply wrong about those procedures and that's why it never gets anything right. You can't start getting it right until you stop getting it wrong. Repeat the thing that is getting it right until you stop getting it wrong. Repeat the thing that is getting it wrong every time, and then it will appear that that is a law of nature. The social structure obviously must be one which regenerates its norms; or the norms would be

transformed in regeneration. But on the whole, if people don't attend to the dissonance between the essential needs of human psychology (which I think pertain very much to people's understanding of their circumstances: that is, being able to get valid information and not to find themselves in a realm where they are either deprived of it, or misinformed, or, told not to ask for it, or told they can't have it because they are not qualified to have it, or something like this) I think this can only induce anxiety. Most of the behaviour which is regarded as normal behaviour in our society is specifically neurotic, if not psychotic behaviour, which is due to the fact that we have a society which is kind of self..... kind of auto-degenerative in terms of the induction of neuroses and insofar as there is anything working against neurosis in an individual, it is something that is within the part of psychology that we don't purport to understand.

Interviewer

So in actual fact, with respect to governments, they are complexifying themselves?

Mark

Oh, I think any error repeated if somebody makes an error....

Interviewer

Error is repeating error in actual fact?

Mark

Yes, because basically, if you make a mistake about something then obviously, the only reason you can ever say you have made a mistake is because you suddenly find your expectation is disrupted in some way. You have carried out some action

and you have some notion of the consequences of that action and those consequences don't ensue, something else does. Now it is conceivable that this could be an interruption from an outside source, or it could be that what you did wasn't such as to conduce to the result that you actually thought you were conducting to; now, if it is the latter and you explain it as the former, you have not only started with one error, you have now added a second error.

Interviewer

Yes.

Mark

Now if, in fact, a person makes a very simple error, a very, very simple error - an error of simplicity in meaning - that it is something which affects... relates to a circumstance which repeats very, very frequently, such as contact with another human being,...

Interviewer

A breeding error?

Mark

Oh, it will breed alright, because the crucial thing is that if somebody's notion of how other people will respond to them is mistaken, then people won't respond to them in that way (in the way that they are seeking), but because they are disposed to seek it, they will not be able to refrain and, either they will correct their error - find how to proceed and no longer be in this situation - or, if they don't find their error, they are bound to repeat it. Now if they repeat the errors of interaction with other people, and they always explain these in terms of something being wrong with the other people when

they find they don't actually succeed^e in what they fancy they are doing, then they are simply going to elaborate the most enormous theory of other people which will all be completely false; and they will use it in every interaction that they are in. They will become more and more estranged; they will find themselves becoming more and more secretive; they will find there are more and more subjects they need to avoid; more and more things that make them angry; more and more times that they are frustrated and they won't be able to get out of that until the original error has somehow disappeared.

Interviewer But it gets more difficult as error breeds error, surely?

Mark That's right. The whole thing becomes more difficult.

Interviewer The deeper you go into this thing of making more and more errors, I should think the harder it is to get out of that situation.

Mark Well, there are two things. I mean first of all, obviously it is bound to bring things to a head in this or that circumstance more and more. In fact, what tends to happen, as far as I can see, is that where people can't handle their interpersonal relationships in a way that brings them any kind of inner peace, any feeling of actually becoming more and more at ease with other people, where they can't do that, then, they nevertheless have certain things in which they need to interact with other people and they tend, I think, to shelter behind formal interfaces, or, of course are simply manipulative. I

mean, if personal behaviour is simply manipulative: 'You will do it because I have got this on you' or 'I can damage you in this way or that', well obviously that is going to do nothing for their personal relationships. I mean: there are people who conduct every transaction they have in their lifetime in this way and of course, they are bound to end up extremely lonely; and the variety of consolations they may seek can be quite enormous. But in general, they will seek the consolation of power, ...and I think that is one of the troubles - this is, it seems to me one of the fundamental bases of tyranny. That basically if you are born..... Say you are born as a child of a Patrician family in the Roman Empire and because of a certain amount of internecine struggle going on around you, you find that suddenly you are Emperor Elect, then, what will happen to any child in that circumstance is, of course, that people will be frightened of offending that child. Once anybody actually holds power then people will not tell them the truth, they will tell them what they want to hear. (Obviously, because most power holders are content to be peremptory in their behaviour.) You are bound to become more busy if you hold power, because you have got more and more things to keep in the air; there is more and more difficulty in protecting it and maintaining it and it tends to make people busier and busier and, becoming busier and busier, they also become more and more either abrupt with each other, or formal. But of course, again, there are aspects of human nature that can't readily be formalised. You get formalisation of sexual relationships basically through prostitution and that you will find that orgiastic behaviour will go along with it, so that

tyranny and orgy are necessarily tied up together. (This is a hormonal connection). But if a person is in a position of power and therefore, dangerous to other people, then other people will tread very warily around them and they will not get the feedback of information as to what is going on. It seems probable to me that when one looks at the psychology of somebody like Caligula. I saw the Claudias plays on television. I don't know whether you saw those?

Interviewer

No, I didn't actually; I didn't have a television at that stage; I have got one now.

Mark

They are very good and I had read the books.

Interviewer

What was it: 'I Claudius', something like that?

Mark

Yes, 'I Claudius' and 'Claudius the God' were the two book by Robert Graves and they were amalgamated in this dramatised thing.

Interviewer

What were you talking about the Caligula?

Mark

Well Caligula: when I talk about Caligula, my interest in the Romans and so-on is largely because I see them as a fairly straightforward exemplification of a power set-up and a technological set-up; they are very like the Americans, the Romans. They had this sort of emphasis on legality, discipline; the whole business of law was very, very intensely developed; British law is founded in Roman law now.

Interviewer

Wasn't that so under the Greeks though, in the sort of things like Plato's Republic?

Mark

Well, I think the Greeks.... the Greeks were different because they never actually... there was never really a Greek Empire, in the same way that there was a Roman Empire and I am much more ignorant about the Greeks; I don't know a great deal about the tyrannies and politics of Greece and I know a considerable amount more about the tyrannies and politics of Rome. So as I say, it doesn't really matter, it seems to me, what example one tends to take because the dynamics of the situation, the pressures that people put upon each other in situations are pretty well independent of technology or geography and the Romans just happen to be a pretty well-known example with some very well-known tyrants like Caligula and Tiberius and Nero. But each of these was a person who, very early in life, possibly from the very beginning, were first of all treated very oddly, because they were of wealthy families; their whole upbringing was quite anomolous - they had nurse-maids and that kind of thing. So consequently, and, of course, the parent-child relationships were highly formalised because the parents were occupied with maintaining their social standing and the business of state and so-on (very much-like the children who are the children of business executives who are the.... or were, some years ago (and the whole pattern is still growing), were 'the depair of the police with regard to juvenile delinquency' - eighteen to twenty year-old children of quite high-powered wealthy executives behaving in a very odd way, stealing things, vandalism). The thing about it there

is that the anomalies of child upbringing that are associated with having busy parents who don't have time for the child, so that the child doesn't actually get through the normal business, or what would be normal if it weren't socially disturbed - it doesn't actually have the chance to relate deeply to its parents, because parents have to keep breaking off and saying 'You can't have that now. I am sorry, I have got to go and do something' or, 'You can see me so many hours a day'. All that kind of thing is very distant and usually people tend to try and compensate for it in our society, by giving the children presents - if they can - and where the child gets stentorian in its demand for the parents then you get the fairly standard problem of our society, and no doubt.... There are authoritarian aspect to this; children can, of course, be completely subjugated to the authoritarian mode and this was very much the Victorian attitude towards how to deal with children. But in comparatively noble families in, say Roman times, there would have been... all the people who actually dealt with an heir through the whole of his development, would have been very, very cautious about what they said, because, if they incurred the child's displeasure, the child could actually do things very damaging to them and, to be in such a situation (to have power) is in fact, in a way, to be cut off from the truth, because everybody will deceive you; they will not tell you anything where your displeasure might be incurred (and they won't know, they will have to guess it) and where revealing to them whatever it is... revealing to you whatever it is that might incur your displeasure might lead to some kind of

retaliation against them, or something of that sort. Everything will be concealed.

Interviewer

Demotion in a job?

Mark

Demotion in a job, yes. I mean it seems to me that it is absolutely beautifully epitomised in the Speaker of the House, who used to have to be dragged to audience, you remember, because, of course, naturally, the things that you want to tell the King are the bits where you don't like the way things are going on and the King is not going to be very pleased about it. (and) This business about being cut off from feedback means that there is nothing actually to moderate the person's ideas of their own limitations, particularly if the Emperor (looking back at Nero or Caligula) has some notion that he is good at something and nobody is going to tell him he's not; and if they are not going to tell him he's not, he is going to end up giving commands in relation to this, which will be inept because he hasn't actually attuned his ideas to the realities.

There are the famous stories for example, about Hitler sending troops to the Russian Front in tropical gear and moving armies on the map that weren't there, because nobody had dared tell him that they weren't there. That kind of thing is actually a perfectly natural culmination of power structures. The whole business of society as it stands in the technological age is that people attempt to settle problems by power. Even voting is settled by an arbitrary process and that process is ultimately

backed by simply by, arbitrary power and it seems to me that this, of course, is why nothing ever gets better, because this is not the way to solve the problem. If it is seen... If people see the solution to problems through power (whether it is personal power), that is, even possibly the child's ability to emotionally blackmail its mother (I mean if the child knows that there is a particular noise that it can produce that will irritate her to an enormous extent to the point where she will concede) then the child is using power.... Now the point is: power actually destroys human relationship and it is the lack of human relationship that underlies the whole problem. So, when you say: 'Don't your answers have a pattern?' They do, because they all come out of that pattern. The idea is that basically power doesn't solve any problems. Basically, when people find themselves in problems they resort to power to solve them. This won't work. Now you just repeat that over and over again, millions of times a day for thousand of years, and you get to where we are now. (Laughter).

Interviewer

Catastrophe or chaos.

Mark

Well, it depends what you see happening. Again, there are many things happening and it depends how you allow your attention to be directed. Naturally if you allow your attentions to be directed by the mass media, and since the mode of manipulation in this society is largely to try and frighten people on the one hand, or stop them from being frightened on the other: one is called, 'making them get their fingers

out', giving them a sense of urgency and the other is called boosting morale.

It is a very big problem is boosting morale. You only need the morale because you say you have got this horrific problem that you have got to face.

'You must do this or something terrible will happen to you', this is the political mode of manipulation. Very few parties actually campaign on their own policy, they campaign by asserting that if you follow the policy of other parties you will meet catastrophe. So nearly all politics is a manipulation of fear. I mean, if it doesn't affect people they don't take any notice. It is when something affects them adversely that makes them initially afraid or indignant (because fear frequently takes the form of indignation and aggression) then they start demanding changes without knowing what to change. So, consequently.... Goebels was quite explicit about this. He said: people who think the function of propaganda is to inform people or to form opinions, are wrong. He said: the whole function of propaganda is to get people into an emotional state where they demand some action and then point them in some direction. They are not in a thinking state. In this state you can actually say something which is pretty arbitrary that you want done and they'll do it if you can kid them, and he was quite explicit. He did actually write about the theory of propaganda but I haven't read his stuff. But I have read Jack Elule - wrote a number of books, one called 'The Technological Society' and another called 'The Political

'Illusion' and it is that one, 'Political Illusion'. He also wrote a very good book called 'Propaganda'. Propaganda goes with power and it is of two types, as I say. Every leader has got to convince people (a) that he has got a policy they need to follow, that means giving them dire consequences if they don't, and secondly, he has got to give them confidence that if they follow him they will be all right - so that's the morale one.

So basically, if people proceed by manipulating with fear, well, the thing that pervades the world as a result, is fear; not surprising. To regard the behaviour of somebody who lives in a state of chronic fear as a norm for human behaviour (which is actually what people do) is just a mistake. The fact that this has been going on for a very long time, means that any evidence of behaviour which is not of this type has largely been wiped out because the fearful will kill anything they don't understand and they have done. But this is one of the difficulties of inductive inference, that you can't apply it in social affairs because social affairs are so strongly conditioned with that..... There is a socially imposed uniformity within a culture (this may not be explicit - there are all sorts of tacit aspects of cultural implements on interaction) but where a social process is at work which actually is contrary to the development of any particular aspect of behaviour and is basically coercively applied socially, then that behaviour will not be observed. But to regard it as being unobservable under all circumstances would be a mistake and yet, it seems to me that most generalisations about human psychology fall into this trap. Anything that is valid human psychology has got,

obviously, to be as applicable to the Eskimo and the Bushman as it has to well, let's say, a director of I.C.I.

Interviewer O.K., thanks Mark for that. I am just going to turn the tape over actually.

Interviewer I have got plenty of cigarettes there.

Mark Well I have put one there for the moment. Oh, I have got my wife's lighter.

Interviewer That's nice.

Mark It's got a blue stripe. It's yours?

Interviewer No it's yours.

Mark That's right, I am sorry. I thought you said it was yours because a lot of people resort to the same thing, you see. We both have these.

Interviewer But your wife's has got a blue stripe.

Mark A blue stripe on it, yes and my friend Garry has, and he has a red stripe on his.

Interviewer If you run out there are some more cigarettes there.

Mark

Tah.

VIOLENCE ON TELEVISION

Interviewer

Right. To turn now to a different topic, have you got any views about violence on television?

Mark

Well, I wouldn't say I have views about it. I would say, if you asked me about violence on television, there are things I will tell you how I feel about it. I don't have any view in the sense that it ought not to be allowed, or anything of that sort because I just don't actually function by holding that sort of view. You know.... It is a thing which does disturb me, because I have a young son who watches a lot of television.

And.... it does... It obviously affects other parents in exactly the same way. I mean they may not be worried about it but they have children who watch it and, if they are not worried about it, it is because they have some particular belief that it doesn't have any effect, or any significant effect and I don't feel that that's so. I think it definitely does have an effect on people to watch violence.

I remember..... When I look at the way my lad behaves, he watches.... he likes horror films and he likes horror films with lots of gore.

Interviewer But they are usually on quite late at night though, aren't they?

Mark Oh yes, yes but we let him watch those. It is quite interesting: I watch films like that with him,... and I have watched films.... they have a sort of - these horror films have an aura of unreality about them, a sort of aura of unreality (The Hammer ones in particular). They are changing, actually. There is a change coming about in this type of film, ever since 'The Exorcist', and the change is quite easy to see; you know, you can categorize what it is. Most of the horror films that one saw prior to 'The Exorcist' were.....

Interviewer That was about '73, wasn't it?

Mark Yes, that's right, yes. Most of those were set in a quite obviously sort of 'Gran-Gignole' scenery - totally unrealistic. I mean, Ruritania or, Transylvania, with lightning and thunderstorms all over the place and weird houses, and, terrible ham acting and very, very conventional sort of villains and heroes.

Interviewer Sounds like Frankenstein?

Mark Yes, that sort of thing, yes. Now these were the horror films and that lasted up to the 'The Exorcist', and 'The Exorcist' made a difference because here, most of the sort of 'background' to the whole film: the sets, the behaviour of people, was ordinary, commonplace.

Interviewer It was fairly normal, actually. It was set in a normal setting somewhere in France, I think; I am not quite sure.

Mark 'The Exorcist' was America.

Interviewer I did actually see 'The Exorcist'.

Mark I don't know about the book; the film was.....

Interviewer It was centred round a nunnery, wasn't it?

Mark No, No, that's 'The Devils'. You are thinking of 'The Devils'.
No, I put 'The Devils' actually in the earlier class.

Interviewer That's about '72.

Mark Yes, that's Ken Russell's thing. No, 'The exorcist' was about demonic possession of a little girl - a twelve year-old girl, I think - and the crucial thing was that it was different from previous horror films because it,.... (and there are people who say it wasn't a horror film, it was just a straightforward film about straightforward phenomena of demonic possession - and I know people who say that, people who believe in that sort of thing)..... I mean I don't I am not hypersceptical with regard to poltergeist phenomena; as far as I am concerned they are phenomena. I don't have any positive belief in earth-bound spirits or any of the occult things. I think, on the whole, that the conceptual structures of occultism are pretty rag-baggy and very, very laced with superstition and....

Interviewer

What grounds have you got for saying that?

Mark

Well, I don't see any more critically in the way that people.... in fact, I see a good deal of gullability within people who are concerned to interpret these things. I mean, there are people who do investigations of poltergeist phenomena and they try to report what they saw and they're O.K. You know, they are not. In fact they are frequently very, very careful to try to describe things in ways that don't assume one of these structured cosmologies of astral planes or whatever. But people who do talk in terms of astral planes and spirits that possess people and that kind of thing, do seem to me, on the whole, to be very very gullable. They don't actually look very critically at what they regard as evidence. They echo each other's stories in so far as it reinforces their belief. And I think that a very large number of the allegedly evidential things are just social reverberations of people who want to believe it. (and most of science is like that). ...

Interviewer

So you wouldn't believe in good and bad spirits?

Mark

Well, I mean, you know, it just isn't a question that arises for me... You know, it isn't as though the question actually is meaningful to me, really; they are not categories in terms of which I think at all. So that um.... I mean, you have to hold against this that I don't believe in a material world either (as it happens). I think it is a misinterpretation of sensory experience.

Interviewer

Sorry?

Mark

I think that belief in a material world is a misinterpretation of sensory experience. That doesn't mean to say that I don't believe that there are demonstrable regularities within the experience. I just think that to explain these in materialist terms is a mistake. But actually, I ought to get back to this question of 'The Exorcist' because that's where I got in.

Mark

Interviewer

That's right - yes. Sorry about that Mark.... (Break for telephone call).

Mark

That's O.K. The thing is that there has been a change in mode of the presentation of these horror films so that where you get round to films nowadays like 'The Shining', which is a comparatively recent one, it is all done against a commonplace background and the effect, of course, is to remove the proscenium arch, as it were. People can watch a film of that sort and think, 'Well, it is rather similar to a newsreel'. Whereas in the earlier horror film they were so hammy that nobody could confuse them with actually, and it does seem to me that this 'withdrawing of' (this sort of peculiar vicarious effect of television, of leaving people actually without any ability to tell the difference between what is veridical and what is actually stage-managed or fictional) is quite a serious thing throughout the society. And, I think the more directly violent things about crime, for example, (where the whole thing is not a question of superstitious beliefs but just a film about cops and robbers) I think that kind of thing,

or political assassination (these very popular themes).... I mean society will show all structures of its anxieties through its violent films. There, I find an oddity. My lad is not interested in those, he just thinks they are a bit boring.

Interviewer

Yes.

Mark

And I can remember at his age a rather similar thing. I mean, he has set his preferred watching in this realm of fantasy, and it seems therefore, because it is in a realm of fantasy, it has already got brackets round it that say, 'fantasy'. He has had nightmares about these things, but they don't actually demand any kind of human response because they are so obviously artificial. So that one can see somebody in such a film having their throat cut and there isn't any real feeling that somebody is having their throat cut. The feeling is actually: 'I am watching a film in which somebody is having their throat cut and I may let it titillate me - give me a thrill of fear, but it is nothing very significant'. When it comes on to things, films like 'Scum' or 'The Sweeney', of something like that, then it does seem to me that there is a social misrepresentation at work in the process, although there is also some social reality. But if you actually look, for example at 'The Sweeney' and you see how many time there are crimes involving fire-arms in it, and if you actually look to see how many crimes there are involving fire-arms in the country, you find that there is an absolutely absurdly disproportionate emphasis in 'The Sweeney' on this kind of thing. And it seems to me... Practically every character who appears in 'The

Sweeny', every personage, is the kind of person with whom it would be utterly impossible to have any kind of ordinary conversation. Every character in 'The Sweeny' virtually, will be forcing for some point of view or other, trying to coerce; somebody with whom one could not relate as human being to human being and I do think that there are emulative effects. It is tied up with the sort of machismo masculinity cults that are very, very common in schools (because most schools are pretty rife with bullying), and the images are taken quite extensively from the mass media. On the same, it can be said that basically the other thing is happening: that the producer with an air of social realism is going round to the schools or, noticing these phenomena and just portraying them in his drama. But the thing is, this is a cycle in which the media representations tend to influence the modes of chosen behaviour and the media justify their picking up these modes and portraying them because they are there. Obviously it isn't utterly static but it tends, it seems to me, if people find themselves watching lots of these things, then it seems to me likely, in young people, impressionable people, to give them a rather apprehensive approach to other people and apprehension is quite destructive to relationship.

If one is apprehensive in dealing with somebody else, then one's behaviour is a bit fragmented; there are awkward silences and there are uncomfortableness which lead to irritation and when people are irritable, you know, relationships deteriorate. So I feel there are probably quite significantly disruptive effects of violence on television on watchers and I think it

certainly doesn't do the watchers' psychology any good. It doesn't do their psyche any good if you want to put it that way.

But again, it is the kind of thing where I find there is no point in my attempting to intrude on it, as far as my son is concerned. I find as he gets older, there are many things that I would like to be able to tell him; I can see him making lots and lots of mistakes that presumably he will shed after some considerable amount of pain in human relationships, but I can't tell him about them (basically because my relationship to him is contaminated by his projections of authority to it) and, of course, because when I do become irritated by him, then I respond quite violently. When I say 'violently', I mean I respond coercively. I say: 'You must do as I say', and to say: 'You must do as I say' is actually violence. That's it, it is basically not allowing a person to follow his own path. Obviously, if I am going to do this, I am going to have some kind of rationalisation. Either I am going to say: 'Well, you must do as I say because the family income cuts out the option that you are trying to push for', or 'You must do as I say because we've got to get the washing-up done, or the dinner cooked', or 'You must do as I say because I say so.... because I don't like what you are doing'. But these things... the rationalisations have no effect on the person receiving them. It doesn't help. It doesn't help to know that when a person is actually exercising authority over you, he is very good at rationalising that authority; the fact is that he is exercising it.

autobiography to see whether.... If they think that that actually gives them insight into a real person then, it seems to me, that it just palpably 'aint so'. Because, even if I write my autobiography, it is only my opinion of what I am. Or rather: if I write an autobiography (which I am almost certainly not the least bit disposed to do), all it would be is as much as I would offer of what I thought about myself, very coloured by the way that I wanted other people to see me, certainly suppressing lots of things that I would feel it would not be politic to put in. I think everybody would do that. So consequently, I think that most of the portrayals of people that we have, either in fiction or non-fiction, are as inept as our own psychological insight.

And, certainly I don't, myself, from a pretty wide ranging exercise of people at many many levels of society, and over several nations, and over quite considerable difference of their experience, I don't see very many people who don't appear to be carrying around quite considerably distorted models of what people are.

Interviewer

Would you consider sports like boxing, karate and fencing, and the like, as fringe violence?

Mark

Well, I don't know what you would mean by fringe violence. I mean I see them as part.... I think there are various reasons for which people engage in these things. One reason which is certainly not negligible is that in our society, if somebody can find something that is socially approved at which

they can perform well, then they will tend to do it. So there are people who would take up something like, let us say, karate, because they found themselves reasonably good at physical things; and there are people who would take it up because they definitely have got some kind of violent quirk in their nature. It is well-known actually, amongst people who go to karate clubs. For example, I have talked to people who do, and they say there are definitely some real psycho-cases at virtually every karate club, because there are people who are preoccupied with physical violence. But there are people who go along as I say, perhaps because they regard it as a gymnastic activity. In which case, of course, you can regard a county cricket match as ritualised battle. And of course, if you look at the emotions that are aroused over some of these sporting things, you see that they are very, very closely related to the violence that is in people. But there are other people who go to karate clubs because they are actually frightened enough to feel they need some method of physical self-defence. So the whole thing is part of a complexion of violence in society. Which I think ties up with what I was saying about power earlier on.

Interviewer

How do you feel about violence in families? Do you think television has any effect or, is a contributory factor?

Mark

I don't know. I think television often puts a bone of contention into families, and that obviously doesn't It's not 'newsreel' with regard to the number of things they have got to row about. The more things they have got to row about, the more

rows they can have. But I think the principal effect of the television... I mean, if you look at the news, you will see a lot of violence on the news, as well as the so-called entertainment programmes. I think violence as entertainment is a very extraordinary thing. It seems to me it shows sources of anxiety very clearly in the populace. But I think.... I think most households would probably be better off without a television set at all (but not that I would in any way attempt to encourage any social policy directed to that end) because I don't think anything brought about by policy (basically again, by power play) is effective. But certainly my lad has been very, very addicted to television at certain times and he is gradually growing out of it.

Interviewer . I must admit I never watched television as a child, or as a teenager because we never had a television, and yet my mother was a very aggressive and violent woman.

Mark . Oh yes. Certainly the roots of violence in society go back a very long way. It is only their expression that changes with technology. But there were never mass media. Mass media can produce social effects, it seems to me, that are unprecedented, just simply because they can pump the same message down the lines to large numbers of people at the same time - and that is something that have never been done before. But no, I don't think the mass media are a root cause of violence in the society, or are a root disposition to it. I think the predisposition to it is cultural, and cultural

from way-back. You know, I would say probably well, some time clearly before Ur of the Chaldees.

Interviewer Oh yes, yes. . . . I must admit in my case, I have acquired a television fairly recently and I enjoy watching it very much.

Mark It depends on what you watch.

Interviewer Yes, I am pretty selective: documentaries or films.

Mark Yes: 'The World About Us' - quite good very often; natural history programmes are very good

Interviewer Yes, 'Tomorrow's World' I don't

Mark Well, even there: we saw a very good natural history programme, a very good filming at 7.25 last Sunday, was done by the Oxford Scientific photography people - they are very, very good - and it was on plants and pollination procedures and the interaction of plants and insects, largely - they called it 'The Sex Life of Flowers', or something of that sort. The filming was absolutely marvellous, but the commentary was absolutely banal and crude.

Interviewer It very often is, actually; I have found that. The photography can be excellent, but the commentary is often very weak.

Mark I found that with that very, very good series 'Life on Earth', that Attenborough did. I thought again, that the filming was

absolutely marvellous but the commentary, (although he was a nice guy), the commentary was most incredibly stereotyped to a very crude interpretation of what I think is a very narrow view of Biology: Darwinian view of Biology.

Interviewer

It is almost going out isn't it now, Darwin?

Mark

Well, there is a certain amount of questioning of it coming up because there are all sorts of uneasinesses about it: people are finding (in various areas of Biology, Taxonomy, Palientology and so on) people are actually becoming much more critical. But I have a single theme that runs through all my thinking, which is largely that it is the culture which doesn't understand processes of communcation, either between animals, or amongst its own number and that basically, the whole of Biology, (indeed the whole of Physics) has been developed without . . . in a kind of 'total innocence' of communicational and evolutionary processes, and Biology has got evolution sort of 'stuck in' in a very crude fashion as 'the survival of the fittest' doctrine (although it is a bit more rarified in chemical evolution). But interestingly enough the actual roots of Physics are virtually dogmatically opposed to the existence of evolutionary process. I think that science is in a great excursion of confusion, and were it not that obviously at a time when the science of a society is in confusion then the whole thought process of society is bound to be in confusion too (because basically, its structures of authority for belief, if they don't derive from some dogma, derive from a methodology). I happen to think that there are logical errors

in the methodology of science; that these can sustain quite massive self-fulfilling prophecies and false perspectives for a very long time; and I think this has been happening and Well, one can't make very much projection because of the general degree of confusion in the world at present and one doesn't know whether any kind of 'keteris paralips' (all other things remaining equal) causes can hold . . . but I would say you know, if there is any trace of continuity (cultural continuity) through the next thirty or forty years, then I would have thought that there is going to be a really massive crisis in science, largely because it is dogmatism and uncriticality under the banner of criticality. The face that you paint the banner that way doesn't really matter if you aren't actually being critical. I think there is very, very little critical thought among scientists.

Interviewer

Yes, yes.

Mark

They may be very critical at a level which is internal to some subject which has become ossified, or its conceptual structure has become set at a level which is not in dispute at the time. Then, there can be a great deal of ingenuity for sorting out critically between, say, rival hypotheses. But if one says: Well now, how many scientists have actually thought to any extent critically about the hypothetico-deductive process? then one finds that they don't. One finds that there are a few books like Meadower's book and Popper's books which lots of scientists have read. These are not very sophisticated books.

Interviewer

You are talking about Karl Popper?

Mark

Yes. . . .

The scientists read them. They find that what they find there gells very nicely with basically, with a faulty methodology they have already adopted and they are reinforced in their attitudes by confirmation. Whereas, Popper's whole point is that disconfirmation is what matters and an ascertainment must be disconfirmable to be scientific. But the whole point about disconfirmation is that it seems to be judged in relation to some kind of a logic or other; you must have a logic of disconfirmation according to scientific methodology, and scientists don't ask whether their logic is wrong. I happen to think that Well, it seems to be pretty well established in communication theoretic work at present, that there are grotesque errors in Bullion logic which, for most people, including a recent author called Goedel Esha Bach (who is a man called Richard Hopstetter who is now the mathematical puzzles and diversions editor of 'Scientific American, and he has been chosen for that because he is regarded as eminent in this realm of machine intelligence and the like. He is completely unaware of work that has been going on in communication theory that virtually abolishes the logic by which he customarily proceeds. Most scientists are completely unaware of this and, the thing that keeps them going is actually technology, not science. It is nothing to do with knowledge. It is to do with whether you can produce

something you can sell, and, of course, the constraints on that have nothing to do with logic.

BALLOONS - SOLAR ENERGY

Interviewer To change the subject Mark.

The other week a fellow crossed the Channel using a balloon and solar energy. I think he did it in two-plus hours. Do you foresee ballooning as a form of travel in the future?

Mark I don't see it as a very important question. Again, it all depends on what you think the future is. It could well be that certain types of journeys (certain types of freight even), can be managed by balloons, but I don't see there is anything very revolutionary in that. It doesn't really matter very much. It seems to me - as I said earlier - you know, the problems of human society seem to be pretty independent of Geography and Technology and I don't think that any technical devices will actually contribute to solving those problems. I think this is the fallacy of the industrial age. Is that basically you can somehow do something to (It is very difficult to find the phrase here...), reduce the problems of human existence - whatever it may be - by technical means. (Economic growth). If we have economic growth then everybody will have every thing they need and there won't be any more shortages for people to fight about. Roughly then, that was, after all, what

Kaines was talking about when he introduced the term 'economic growth' that became a catch-phrase. But it is like so many things. The radio has made a great deal of difference to society, but, whereas looking at it before it got to where it is - looking at it before it became institutionalised at all, one might have thought that this could be a pretty constructive thing. I would have thought that if you had approached anybody like say, the Victorian utilitarians, people like John Stuart-Mill and Jeremy Bentham and mentioned to them the possibilities of radio, they would have immediately seen it . . . I don't suppose they would actually have seen it in any terms other than educational terms, because their view was that one would alleviate the problems of society by educating people. You could see the O.U., as a rather similar venture. But that's not the way that radio turned out to be used. And it is conceivable that something like balloons could come along as a new technological fix for some minor problem. But it wouldn't make much difference. So I wouldn't be surprised what happened. But I wouldn't care much what happened in that way.

Interviewer

Solar energy has been used up here, for solar heating.

Mark

Oh yes. I take it that this would be a hot air balloon and the heating of the air, instead of being done by carrying fuel, would be done by solar energy and that seems fairly straightforward and an easy thing to arrange. Yeh. I mean, the question of what the balloon is made of seems to matter

and It depends. It could turn out to be another diversion just as hot air balloons are now. But a solar-powered hot air balloon has got only slightly different potential from an ordinary hot air balloon. There are developments which seem to be much more interesting, like putting up these (basically just very, very simple plastic bags which self inflate under solar influence and then rise in the air) and you can put these up over the deserts and make shade in the desert to grow things in. That has obviously got a tremendous potential for changing the physical nature and productivity of the earth's surface. But, so I would have thought radio probably had tremendous potential for educating people. It wasn't used that way. I don't see any reason to suppose that things will change much.

Interviewer

No, no.

O.K., right.

DEVELOPMENT OF THE THIRD WORLD

Interviewer

Have you got any views Mark, on development of the Third World, politically and economically?

Mark

Well, this was a thing that interested me a tremendous amount at one time, because it is all intricately bound up with the whole ecological problem with which I was very deeply concerned from about 1954, through to, in a way, the present

time. The way I saw the problem changed fairly radically round about 1976, and the things that previously I had been able, along with lots of other people, to believe were the things to do to solve certain types of problem, I then saw were not in fact prone to solve the problems at all, but to perpetuate them. And, I see the problems as being perpetuated because people respond as I used to respond. So I therefore, have a completely different view now, about the Third World. I would say that um..... first of all I have much less of the technocrat in me than I used to have. I used to think that it was a question, again basically, of better informed technology and better applied technology to alleviate the problems of The Third World and that would go along with economic development in the Third World and what-not. But I don't think that is actually the nature of the thing. I think that most of the things that had been done as a result of that, have largely turned out to be catastrophic in their influence. But the economic process which is basically (if you look at most of the nations in Africa and Asia up to the Second World War period) you see nobody was talking in terms of economic development, or industrial development and the Third World didn't exist, it just wasn't there. Gradually a degree of sloganising arose around it and various views as embodied, for example, in The World Bank and things like World Health Organisation and World Food Organisation, all these things were drawn in (because of the so-called revolution of rising expectations) but on the whole, it seems to me that most of the changes that have gone on have been pretty catastrophic. Through the era in which these doctrines were

nominally being pursued (that is, basically from the time of about The Bretton Woods Conference, to the energy shocks of late '73), during that period nothing very much happened to show any great improvement in conditions in any Third World country. I mean they became more urbanised, but they also became more poverty-stricken. On the whole, these things are mistaken because the problem doesn't actually lie there. I think the problem does lie in human relationships and human psychology and these are quack remedies.

Now obviously, if you have a social system that reinstitutes a problem because of its indoctrination processes: largely its modes of educating its young, of forming language and conditioning people to use that language; if a person's language is conditioned, what he can talk about, what he can think of is conditioned. People actually believe that their perception is somehow there, and you just learn to talk about it, but actually what people perceive is conditioned by how they learn to talk. It seems to me the problems are deep and at this level, there is a great degree of anxiety in virtually every society that isn't cut off and self sufficient in some way (and you know, there are very few societies which are now cut off and self sufficient). But there is very great anxiety in all these countries - I think as a result of these fundamental human questions, and the source of the anxiety is not seen in those terms, it is seen in its overt terms: having more of this or more of that, or changing the economic circumstances.....

Interviewer Changing the way people farm, for example, in India?

Mark Yes that's right. Yeh! I mean, it is quite different to go and just dig a tube-well for a village, that is one thing, but to have a programme of.... some massive investment programme that is supposed to bring benefits to the people you know, generally it doesn't and that is that.

Interviewer And also, I suppose, one needs too change the attitudes of politicians in the relevant governments?

Mark You can't do that. I don't think that's 'doable', and this is how I think people go on from age to age with no improvement. It is this... Basically you have...

Interviewer Is is the error breeding error thing all over again?

Mark Yes, yes - I think so. But the fact that there is this deep source of unease in society means people are uneasy; they are looking for solutions to something or other which they think is the problem. Now my supposition is that most people are wrong about what the problem is. So consequently, because there is great demand for solutions, there will be a huge offering of quack remedies, you see, and I think economic growth and technology are amongst these. Now it is very important to modify what I say there. I don't mean that if you were immediately to cut out all your technology or your economic growth, the problems would go away. What I mean is: in the event that the problem were attacked.... Attacked

is not the word... If people actually did become emancipated from the false directives that they give themselves socially, then I think that some of the phenomena that one sees as technology and economic growth would actually occur, but they would be a different set of phenomena from the ones which you get if you just promote technology and economic growth. And there will be a wrong set; there will be a set that won't actually work. So on the whole I think that the present mode of emphasis are all totally misdirected. So consequently, you see, I don't feel fired with enthusiasm about this programme or that - because I see them principally as futile, because they miss the point. There's a thing up there, look, it says: 'On solving the wrong problem....'. So as long as people keep doing that, they will not even see what the right problem is. If you don't know what the problem is, there's no way you can do anything about it.

Interviewer

O.K. Mark, I think I will turn over the tape now.

Mark

I discovered a long time ago that a timetable is one of the most dementing things in the world, so on the whole, I try not to get tied up with a diary like that. Flexibility is the key.

Interviewer

Well of course, doing research, I have got to have some sort of diary.

Mark

That's right. That's right. Yeh!

Interviewer

But it is quite packed actually (leaving a few hours for flexibility, people not sort of arriving on time, which might not be their fault), but I usually try to get as much done in.... I think Bill usually gives me about a month (I don't think he estimates things like that) but I usually get things done fairly quickly and then simmer on them a week before I have got to see him. I think that's about the best way to do it.

Mark

That sounds pretty good, yes. I mean, if you have got a timetable and you are not finding it anxiety-provoking, well then that's O.K., it depends on how free you are to change it. My wife took a job a little while ago teaching a class of special kids (it's a unit called C & G - a lad from here went to the City and Guilds Institute.... Anyway, she has been doing voluntary work with the school, just going up and helping and she was invited to take this job and I said: 'Don't. We don't need the money and you will get a timetable and then you'll find that you can't do anything that you want to do'. She went ahead and did it and she got more into that than even I had feared. But she couldn't get out and it came to the end of the first year and I said: 'Well, what are you going to do?' and she said, 'I am going to resign'. And, she let herself be talked into another year.

Interviewer Oh no, really!

Mark Yes, because they said this will change, that will change and the other will change; and we will do this and we'll do that and we'll do the other and um... so she felt 'Oh that won't be too bad working under those conditions', so she signed on again and only a fortnight later they changed everything back and said: 'Exactly like last year... even the same class of kids'; so that all the preparation work that she had done was no good (so she couldn't use it again you see). So she had to do the whole bloody lot again. It came the end of that second year and she resigned that time.

But during that time, we had trouble with the car (and she drives and I don't) and she couldn't get off school to get the car to the garage.... Oh, the number of things that were screwed up by this timetable was incredible.

Interviewer I don't really like having a timetable as such, but it is important if you are doing interviews; you have got to have some schedule.

Mark Oh, if you are making appointments you have got to do that; you have got to make jointly constructed expectations.

Interviewer Yes. But I have actually, up to now, only booked in one person a day (given them practically all day - the morning to come in to have an easy lunch - and then see them in the afternoon, which I think is quite nice); I have found if I try

and see two people in a day, something usually goes wrong. But I have on one occasion got two people, because he said: 'I would like to do it in two sessions'. So I can't really object to that because he wants to do it, but he can't do it any other way. I wouldn't think that's ideal but you can't really argue.

Mark No. It is quite interesting to see whether you think, when you look at the results, that there is any difference conducted by that.

Interviewer Yes. I think the only I don't like missing is my guitar lesson on a Tuesday evening.

Mark Really! Are you doing Spanish guitar?

Interviewer Well yes, it is classical guitar actually.

Mark Are you going to a Spanish guitar centre?

Interviewer Well, I am going to Goldsmith's in London, for classical guitar lessons.

Mark Oh really; I don't know anything about them. There is a place called The Spanish Guitar Centre, which was set up by a fellow called Len Williams, whose son is John Williams (Elizabeth went to that - they had beginners' classes and things);

Interviewer Where's that?

Mark Well it used to be very near Leicester Square station.

Interviewer Really!

Mark But I don't know whether it is still there, because Len Williams retired from it. He went to rear Sooty Woolly monkeys because he is very keen on monkeys, and he had made enough money then to be able to get his own menagerie. That's what he turned to: turned away from the guitar to monkeys. But John Williams, of course, was his son and, by the time he was eleven, he was absolutely incredible.

Interviewer Well, I have only started playing since January. But the fellow is much more classical than any other (like than folk guitar - you can't strum, you've got to pick all the time).

Mark That's right; you are learning finger style and that is the best style to learn, actually.

Interviewer But I, in actual fact, do strum odd things on my own, because it gets a bit boring otherwise.

Mark Well you can make those improvisations yourself, but to learn the purist skill is a good idea because otherwise, you may acquire bad habits that actually cut you off from that skill (that's a common defixity).

Interviewer

Yes, and in actual fact I sort of took up the guitar after my family troubles and I found it a great form of relaxation. In actual fact, at the beginning of this year, I was writing up my literature review and other first bits of the chapters this research and the tutor could actually tell how tense I was (or rather, how relaxed I was) by the way I held the strings and in some cases I couldn't form chords. And he would say: 'What's happened to you, have you been writing all day or something?' So I really love it actually, so I am quite anxious not to arrange interviews in the morning or the afternoon because I think I would be too tired for the evening. But I mean, if people could only see me on a Tuesday, then obviously I have just got to miss a lesson.

Mark

Yes.

HUNGER STRIKERS

Interviewer

Anyway Right.

I was going to ask you what your view was (or is, rather) on the hunger strikers currently on hunger strike in the Maze Prison in Belfast, whether you felt that these people should be given political status or not?

Mark

Again I don't . . . I don't have that kind of view. . . . Obviously there is a great sorrow about the whole matter, which I don't shrug away. I think the whole situation in

Northern Ireland is horrific and I don't like the thought of the degrees of suffering that are entailed in that sort of thing. The whole business again, is one of these political loggerhead situations. One can see that one has a fearful Catholic minority in the North, surrounded by the Protestant majority, and the friction that that boundary has produced: an immense legacy of fear and hatred, mistrust and misrepresentation and, one sees that that Protestant majority is actually cowed by the prospect of the Catholic majority to the South of them; so that in the event that there was a withdrawal of mainland support to the Protestants, they would then be a 'minority'. So you have a sort of 'four-deep nesting'. You have the Catholic minority in the North, then you have the Protestants who are a relative majority in the North, but a relative minority, if you integrate Ireland and then you have Britain, largely seen by the Protestants at least, as a moderating, prospectively, protective influence against them being, you know, becoming strictly subject to that Catholic majority in the South. And one can see that on both sides there is a very intense fear, and an intense desperation because as these attritional things go on, there is, there are various things happening, there is a tremendous economic drain, there is a tremendous burden of anxiety on the population, there is continual exacerbation of all those facets of interaction that lead people to desperation eh, and there is, there is the extremism on, well, as far as one can tell, on at least three sides. If you see the army as basically involved in terrorisation and, after all, we attempt to enforce discipline by the iron hand of terrorisation, em, and, you know, the fact that there

is various terror abroad, as it were, anywhere in the world is just something which is a matter of deep sorrow. On the other hand, what the precise details of the, um, of the situation of terror are, one can never find out, I don't think anybody can be sufficiently well informed of these matters to know much about it, because all persons concerned are making false claims, and um, making false denials all the time, so that most of the things that actually conduce to confusion and terror are the, um, emanate from the degrees of misinformation that are around. Obviously, one um, when there is this type of social confusion, then people all will tend to be more concerned when people with whom they feel a degree of sympathy are suffering, than when they feel that people with whom they are out of sympathy are suffering. They tend to say 'well serve them right', and when it's somebody with whom they have sympathy they say, 'Look what appalling behaviour is being demonstrated by the people inflicting this', and that is a symetric situation. Um.... I, you know, I would like to see this suffering go away, but I haven't the slightest idea how the political status would bear on it though. You know the time when, for example, was during the Shah's rule in Persia there was colossal barrage of criticism from Western Countries about the fascist nature of the regime and the injustice and um, oppression of the Shah's regime, and there were groups, terrorist groups working to oust the Shah, look what happened when they did! I mean who can tell t'other from which, um.. I've no idea.

Interviewer I mean, these men are mostly terrorists aren't they in fact.

Mark Well, they are because they are figure heads um.... They have become.... The tactics adopted by the I R A... They've got all these people..... Terrorist is the British name for them. If you happened to be of similar persuasion yourself, you would simply regard them as heroes, or partisans, or Nationalists, or Republicans, or you know.... The number of words people use in any complex situation can be designated by a whole set of 'hooray' words or a whole set of 'boo' words. And this business of just 'hooray' and 'boo' seems to constitute politics. It doesn't seem to me to be very fruitful. They are the reasons that the hunger strikers are terrorists is because the whole point is to hold hunger strikers in prison, and the people in prison are the people who have been put in prison.

Interviewer Yes.

Mark They have heroic status with regard to their following, because they have been put in prison as martyrs to the cause. I suppose the one thing they are trying to... obviously political status would seem to be very important to the IRA because they could no longer be designated then as terrorists or criminals, um.. and I think that would have some effect on the jargon in which the matter is discussed. What effect any change like that would have on the um, the power and dynamics of the situation, I don't know, but I do feel whatever changes occur by the methods of power play they will never solve the problems of sorrow which is the only problem there is to solve.

Interviewer How would you set about solving the problem of sorrow then.

Mark You can't start on other you have to start on yourself.

Interviewer Yes, Well...

Mark It's a question of um... It's a question of looking at it very carefully, looking at yourself very carefully.

Interviewer Introspectively, Um..

Mark And Um....

Interviewer Something to do with being at peace with yourself.

Mark Oh, very much so, yes. It's very difficult because one feels, that one is made very strongly aware all the time about the amount of misery in the world.

Interviewer Um...

Mark And um one feels one would like to see it diminish and eventually disappear..... . And the fact is, it seems to me this is not going to be done by trying to persuade anybody of anything, it can be done only as people become aware that the matters that are habitually followed are the matters that actually re-institute the regime of misery. Um.. I don't think that people... That people are very, very prone to respond to the global sort of treatment. You see they are agitated.

There is a huge amount of palavery talked about this, and they are looking for quick solutions.

Interviewer

Yes.

Mark

So if something is turned up, which together with its know..... if it's effectively biased and supported by a neat rationalisation propaganda programme, or if it is more significantly still actually, if it mobilises anger and indignation, then you can get following for that particular programme or a reform measure and um.. Most people see this, I think, as a.. as they way to change circumstances so they become busily involved in trying to further some programme, or the power situation of some party or other, and they tend to think that this is um... this they would regard, I think personally, as altruism. They would say this was unselfish activity and, in fact, they can become completely preoccupied by this and at least it makes them feel busy, and busy in a righteous cause, but it seems to me that busyness in a righteous cause is a bit of a foolish thing to want to feel if, actually, the type of activity that flows from it doesn't solve the problem, and I just don't think it does you see. I think that the conflict arises from the expectation of conflict. That peace arises from the expectation of peace. And it's very difficult in a world where one is continually shown the overwhelming evidence of conflict, to give any credence to the notion of peace.

Interviewer

So if you expect peace you get peace, and if you expect conflict you get conflict.

Mark

Yes, because it colours your whole approach to everything, it's the ultimate context, and I think that people... where people are looking for opinions, looking for suggestions; they will just get more of the same, dressed up differently, varying slight, according to the way that the institution forms have varied. But um.. basically they're responding to fears in themselves and they're not actually examining what the nature of their own fear is. I think that if people do begin to examine the nature of their own fears they can find that they can emerge from it. When they emerge from it, their behaviour is different and it doesn't actually produce world shattering effects but it does produce..... Well, I could show you this on paper, but I can't talk it to the tape. It's a question of , basically, the degree of ambiguity with which people confront the world. Where the world appears multiplally ambiguous people tend to be very frightened. Or, either very frightened or extraordinarily sort of.. mum... fanatical, you know, there are some people... Gordon Liddy the um Watergate.....would be a very good example. Somebody who appears to manifest very little fear, he does things, serviced prison sentences. He'll take somebody on in a fight without apparently being afraid, hold his hand in the flame of a candle for ten minutes, that kind of thing. It's really an amazing thing that at the root of all his behaviour is, basically, a sort of fear of witches, a fear of subversion and his behaviour for all of its ostensible bravery is um.... governed by fear. There is an intense

difference between bravery and fearlessness. A brave person is somebody who can confront the frightful. A fearless person is a person for whom there just isn't anything frightful. These are quite different. You don't have to be brave to be fearless.

Interviewer

Oh I see, yes, Yes. In actual fact, getting to the root cause of one's own fear can be quite a painful process, can't it?

Mark

That's right, and while people run away from that pain, the sorrow remains in the world.

Interviewer

Yes.... It's easier to sort of, um, go in the opposite direction and hope that the fear will go away.

Mark

That's right, and that hope um, that hope is one that is being cherished by innumerable people who will all find out, as far as I can see, that it is not so.

Interviewer

Would you say that the hunger strikers then, are brave, or fearless?

Mark

Oh brave. Definitely I would say that they are brave. I think if they were fearless they wouldn't be in terrorist occupations or, you know, military occupations, basically I said military there because well, that is as presumptive actually of a republican point of view, as to call them terrorists is presumptive of um.. of the British government point of view, so really I would say violent activities, violent activities

obviously don't further anything. They're just a kind of displacement activity as far as I can see.

HOBBIES

Interviewer Right, to change the topic completely, have you got any hobbies Mark, or pastimes, activities that really turn you on that take you away from the commitments at the Open University.

Mark I've never actually had a hobby that could take me over. At present, I'm not really pursuing any hobbies, although I'm beginning to prepare myself to return to an earlier one. You know if a hobby is some kind of leisure time activity which is self contained..... . From time to time I've played a lot of cricket, at one time. I wouldn't call it a hobby, I just played cricket for twenty, twenty one years, two days a week, but I wouldn't call that a hobby. The only thing I've ever done as a kind of hobby - I've always read a lot, but I wouldn't call reading a hobby, just regarding that as um.. part of just daily life. So, the only thing I sort of plummet into by way of acquiring a quick... spending a lot of time on it, is taking photographs of fungi. I started off (I should say really the hobby is taxonomy of fungi) not because I ever expect to originate anything in taxonomy, just because it really is a completely pointless activity, except that I can identify large numbers of fungi and I enjoy doing that. I liked the walks

and the other people who did it, and I started taking photographs of fungi initially for purposes of identification and then I thought I would... I found during the time that I was trying to identify fungi that there weren't very many good illustrated books available, so I thought at one stage that I would just go on taking my photographs and one day, if I had enough, I would put them into a book. I did this for over a period of about thirteen years. I used to spend my autumns, six weeks in the autumn is the whole season, so it can't take you over for the rest of the year.

Interviewer

No. Uh huh.

Mark

I used to spend my time going to different parts of the country for the holiday, because I worked in University towns, and my wife was.... She was teaching in a school. We used to take our holiday in September. That's right! Though how she could do that, I really can't remember.

Interviewer

Presumably, she started back at school the first or second week in September.

Mark

No, I know how it happened. I know how it happened. We started doing this in 1961.

Interviewer

Yes.

Mark

By 1966 she had our son. We had a child and she stopped work, and so consequently up to the time he was about five

we used to continue this business. We could do it because she had September's free. I had September's free, and he was sufficiently young, not to have intensions of his own for the holiday. As soon as he became about five, he wanted to spend his days on the seaside and so on, and so we had to break it up. She used to take him to the seaside, I went off and did the photography by myself. But we've always spent a lot of time together doing it, so there's always been a degree of companionship and common interest which wasn't vital, but nor was the photography vital. Nothing about it was vital. It was just all pieced together. Well, that's about all. You know, other than that I um, just attended to my work and to current affairs; which I used to spend a lot of time doing. I used to um.... At one stage I was very strongly in with a number of economists, and used to spend time talking to them about economics, but you know that was all part of the work. Well, that was one of the reasons why I used to read a lot of current affairs.

Interviewer But one can't stockpile fungi in actual fact can you.

Mark You can't preserve them, that's why I photographed them. If they had been preservable, I've no doubt I would have got into pinning them or whatever you would have done.

Interviewer Yes.

Mark But they're not um... they're soft tissue things and they, most of them rot, unstopably within two or three days. I know

that nowadays you can actually get a freeze drier and freeze dry them and they will preserve their appearance for quite a long time. They are slightly modified, they wrinkle a bit, but they're pretty good. But I'm just not really interested in doing that.

Interviewer

No. But can you actually identify fungi from photographs?

Mark

If they've got very marked and they've photogenic distinctive characters, yes, but lots of fungi um... Lots of the subtlety in fungal taxonomy is distinguishing between closely similar species and that may come down to something like the details of the spores.

Interviewer

Yes.

Mark

So if it won't go in a photograph, you can't. So you could have, I should think you would be able to find five or six fungi all of which were photographically indistinguishable um.. whereas quite obviously you can find several hundreds, or quite possibly thousands, of species which are fully distinctive and if you had a photo of them you would know what it was. But it's not, you know, it just depends. Some are distinguishable by smell and some by colour - change when you break them open.

Interviewer What you mean they go red, blue or orange or something?

Mark All those colours. You name it they'll do it. One or another will do it. They are extremely interesting bunch of organisms. But again you know, I haven't got any really deep interest in them, its just that they are very nice, you find lots of them if you go for walks through woodland, woodlands in particular in the autumn. I started it simply because I used to teach Ecology on Wimbledon Common. When we got the students that weren't where they could use the equipment, the staff had to be around in case the students had difficulties, but they very seldom did, once they had learned how to go about it, and so I just used to wander around Wimbledon Common looking at the fungi. And.....

Interviewer What really turned you on?

Mark They are remarkable things to find. You walk along and you come to a bunch of them, they are quite spectacular. You walk a few yards more and you find something that looks another very extraordinary thing, different colouration, different mode of appearance and they are quite fascinating.

Interviewer Can you actually identify them by eye.

Mark I can identify probably something of the order of about half of the British species.

Interviewer

Which is what, a couple of hundred?

Mark

Oh no, it probably runs.... probably about three thousand species. Half would be about fifteen hundred. There are probably about three thousand British species of fungi that are of sufficient size to be examined with the hand. When you get all of the microscopic ones there are vastly more, but I've never taken much interest in the microscopic ones, simply because you don't stumble over them on moonlight walks. Sometimes you pick up a piece of wood, and you look at, and you find that there is an example. Well look, here is an example of one microscopic fungus that I can certainly identify because it makes black spots on sycamore leaves - the fruit body itself is very small and its in the microscopic class, but the spots on the sycamore leaves are very big and that's the only thing that makes these black spots, so when I see them I know that it is *Riteous Musaturinum*, but um, there are a few like that, but I've never actually gone into micro ones at all. They're the ones that are the economically important ones, all the There's no money in micro-fungi, but there is a lot of people who are.... A lot of professionals in the micro-fungi field, because they. Well, there are a variety of reasons. There's um.... Planthology is very important. There are fungi which are very destructive to standing crops, to stored crops and of course, there are anti-biotic fungi - that you get anti-biotics from fungi. These all tend to be microscopic and so most academic interest in the universities in micology tends to..... I've not actually followed that line

very much at all as it's more or less conditioned to the way I like to spend my time in the autumn, that is.....

Interviewer Yes. O.K. I think actually I'll turn over the tape there Mark.

ADVICE TO SOMEONE GETTING MARRIED

Interviewer The tape's run on now Mark. Right. Is there any advice that you would give someone who is getting married?

Mark Nothing that I could put into, you know..... Nothing that I could say that I felt would apply to everybody, or anything of that sort. I mean, just the usual thing that I would say to anybody about anything I suppose. You. Not that people would actually be concerned to hear it. Most people who need advice can't benefit from it.

Interviewer Can't?

Mark Yes, That's true, if somebody comes to me and say: 'look I want to buy a vacuum cleaner, do you know anything about this model or that model? I can tell them what I know about it. They may or may not benefit from it. But that's not advice, that's information. On the whole, you know, somebody who is quite capable of .. um, personal interaction seems to me not to be in need of advice, and anybody who has... um, anybody who might benefit from some certain type of personal

advice... um, for example, if you think about marriage you might think jealousy would be a very important component. And so you could actually explain to someone that jealousy is self-defeating, and that to basically manifest jealous behaviour to someone is to estrange yourself from them, and ultimately, to justify your own jealousy by forcing them away from you, and it's very easy to see what the inter-personal dynamics of that is. On the other hand, someone who isn't disposed to be jealous in the first place, doesn't need that advice, and in the second place, if someone is prone to be jealous they can see the destructiveness of it but they can't stop. So they can't actually benefit from the advice. So on the whole I think that advice about things, um, you know we live in a society where advice giving emanates... is; it actually, it permeates vast numbers of professions. In fact, people don't follow the advice very much.. If you look at the advice about smoking, we are both sitting here smoking.....

Interviewer

Yes.

Mark

The only sensible advice about smoking is to give it up. People don't. I don't. Um.. In the same way, I think that most of the things that people do which are contrary to their own, um. really their own, their ultimate happiness are things that in general we can't refrain from doing. So they can't see the reasons to refrain from doing them, or, if they can see the reasons they will still do them, but they worry more. On the whole, I don't think that advice is something that people find very easy to take. People can discover things about

themselves, and it may happen that in somebody, maybe advising them at the time when they discover it. I think that is just a fluke. I think actually all learning really comes from inside because there is the processing. Anything that comes through somebody ostensibly is learning material, still has to be interpreted by them from the standpoint in which they are before they actually take it on board. And if that standpoint is such as to exclude their understanding of it then the, maybe there is advice as a physical signal but it's not going to be read by them with any interpretation that would mesh with the interpretation of the sender. So on the whole I think advising is, um.... Well I don't like advising people under any circumstances largely because I find that that is what happens. People who need help, only need it because they can't recognise it, if they could recognise it it's all over the place.

Interviewer

Yes

Mark

So that as soon as they can recognise it they don't need it.

Interviewer

Would you say you could give somebody a recipe then for getting married?

Mark

No, No I'd say if they spend enough time being quiet and examine their own... well just watching their own emotional reactions to things, their own behaviour to other people, listening to the tone of their own voice, then they will find out anything that anybody could tell them. But in a way that nobody could tell them.

Interviewer No.. What criteria did you adopt when you chose your wife?

Mark I didn't use a criteria at all. I didn't go round with a shopping list.

Interviewer No, No.

Mark It's really rather peculiar actually, I mean, if a few years before I got married you had asked me what type of woman would you like to marry? I would have been able to give them some kind of a list which would have had a fair amount of emphasis on certain physical characteristics, which is very strong in our culture. You know that propensity to look at women from the outside and I would have also said a few things, I've no doubt, about interests and intelligence and that kind of thing which I think in retrospect, would first of all describe somebody who didn't... couldn't actually be put together in any way, because there would be internal inconsistencies that had not occurred to me as such because my way of looking was so random. And I think as it turned out, when I met Elizabeth and ended up marrying her one of the interesting things is that she would have overlapped that list in only about two or three minor respects. She has no um.. there is virtually nothing about her which corresponds to what was then my sort of cheesecake ideal at all. So one of the things was, I did actually learn the irrelevance of that. But I think the thing that really did.. um.. there was one particular thing that really I would never have thought of, until it happened. That was basically a kind of very simple

and deep truthfulness and an unwillingness to well, actually, I can't bamboozle her with emotional flannel or dramatics and I remember an occasion on which I was being a bit dramatic and she managed to cut right through that without making me feel put down. That's one of the difficulties she managed to cut right through that and get me to look at myself, look at my own dramatisation, and stop it. Which meant that the matter that was under discussion..... I can't even remember what it was at the time, was therefore, confronted much more cleanly, and without all this clutter of my smuggling things in and trying to force results and that kind of thing. There's a kind of truthfulness I think that to me seems to be the important thing.

Interviewer Yes. Anything else other than that?

Mark Well, do you mean specifically about Elizabeth or just in general?

Interviewer Well, about Elizabeth yes.

Mark It's very difficult to say. I can't say why I enjoy her company. Um.....

Interviewer Something you can't communicate to other people.

Mark Something about an absence of dire moodiness and a fairly deep calm. She can panic on the surface, but she doesn't actually panic deep down. I think she is comparatively free

of illusions and zeals which helps a lot actually. When I say comparatively free of illusions, I think we are all terribly subject to illusion and, I'm not holding her up as an absolute paragon in this respect. What I mean is that I know there are many people tht I know that are subject to illusions that she doesn't share, and her not being subject to them makes it a lot easier to copy with many, many problems that arise if you have to confront jointly. She's not, although again, she has the kind of anxieties that we all have about other people's opinion, she is not actually dominated by other people's opinion she'd be worried about. For example, the way we actually keep our household doesn't mesh with, say, her mother's idea of how you should keep a house. When her mother comes, she is tense about whether her mother thinks.. what her mother's views will be _on the fact that we are grotesquely untidy compared with her. But on the other hand, I find it's very easy living with her largely because she doesn't have any obsessions about tidiness and we, we manage not to get caught up in rituals to a large extent. you know, there's not... um. I think that basically is advice about getting married.

Interviewer

You would still advocate marriage as opposed to living together?

Mark

Well, I think that we got married actually largely as a means of reducing propsective harassment. Neither of us felt that marriage as such, you know..... going, going through a ceremony, having a piece of paper had much to do with our relationship either way, so consequently, we did not object to

getting married. The important thing I think about marriage is this question of commitment. Um.... I think that if people get married with the idea that they are actually entering into a contract, and that the relationship is modified by the existence of that contract, then I think they have already made a mistake. It's just, I think, that we were not frightened of getting married, not frightened of making a commitment, because we did not actually see it as being, as actually binding either of us in the event that the relationship broke down. Nor did we expect the relationship to break down. We just didn't. Um... I think the crucial thing is, perhaps there would be a bit of advice that I would give, but as I say, it would be the same as advice pertaining to anything else, basically if anybody is thinking of marrying somebody then they need to look very carefully at their own idea of themselves - their own idea of what is happening - and try to be as honest with themselves as possible because at such times there are anxieties which people tend to suppress. They think 'Oh well there is this difficulty between us but perhaps if we don't put too much on it it will go away'. Look very carefully at it and see if there aren't so many of these than you are kidding yourself. You know, lots of people feel so very urgently that they want to get married, it might be their last chance, or this kind of thing. So I feel that under those circumstance they can indulge in a kind of wishful thinking; because here is somebody with whom they have some relationship, which they, (and you know, this puts them in a position of not having to look around for someone else) and maybe it can be made to work, um... there may be things that are irritating about

the other person to a really deep extent, but perhaps they will be able to change the other person in some way. I think if there are all these provisos then that's a bad sign. You need to look and see that you are not deluding yourself as to the way the other person is, or the way you are. If the people can be sufficiently self critical when there are frequently emotional reasons which might lead them to self-deception, the... you know, marriage like everything else is something which is better contemplated from a self-aware and self-critical point of view, than on a wave of enthusiasm in which one would rather paint oneself a rosy picture and hope for the best.

Interviewer Right. Um.....

Mark All I would say is, abandon every element of romantic thought that you are putting in, because that's all very destructive.
(Laughter)

Interviewer Our little fly seems to have gone now, wherever he is.....

Mark It was a crane fly.

Interviewer We've got heaps of them over here actually.

MY JOBInterviewer

...Um.. To talk about something different - how do you see your job at the Open University?

Mark

Well this is quite a difficult question for me particularly. I would have answered it differently again some years ago. Um... because I have a lot of disagreement with people in the faculty largely about fairly straight forward matters I think about the services, about the design of courses, about the necessary structures of educational material. I have notions that I thought were being disregarded and, that any disregard of them, really just landed a mess on the student.....

Interviewer

This was in technology?

Mark

Yes and... um... then eventually I became very, very well.... pretty well isolated in the faculty with regard to things like.. which would be done, and there were so many faculty decisions that went in quite different directions that there wasn't very much point in trying to get any different view point to prevail. So, I came to the notion that most of what the people who are teaching have to offer is.... ah.. some special command. Perhaps quite often much less than they think they have got. And most people are unaware of their own limitations. That goes for academics too. Um.....

Interviewer

Most academics aren't aware of their own limitations are they?

Mark

No, I don't think so. I think that most of them are definitely quite sure of lots of things, which if they were to look more carefully they would find aint so.. Something you don't know is O.K. as long as you know you don't know it. The thing that is really damaging are things that you think you know that aint so. Plato said that. (Laughter)

Interviewer

Something like academic arrogance I suppose.

Mark

Well, one can see that there are norms you know, the way people look at themselves and in our society in general is a very... our society is a very assessing society and an evaluating society and um... they assess themselves largely by comparative standards... I'm better than such and such, but I'm not as good as such and such and no worse than such and such... and.... um.. the result is that if there is a group, and there is an error which is shared by all of them they will all be oblivious of it. And that can make an absolute change that is over the whole group and can mean that the whole group is in effect incompetent in certain respect. But since that particular mode of incompetence will not in turn enter into comparisons within the group, they will be completely unaware of it. And most of them, it seems to me in my experience of academics (and it's very important to say this goes for me as well right to to... well... 1975 at least...) um... have a good command or some command, good or bad of their technical subject. But they have no very great appreciation of the

student's problems in the learning, or what actually must be the conditions if the student is to learn adequately. So they tend to present the matter from the point of view of the logic or the ethos of the subject. More the logic if it's on the mathematical side, more the ethos if it is on the social side um but,. they are looking into the subject, they're not looking at the student's problems in a learning situation and it goes.... um... I had a sort of, what I thought was a breakthrough appreciation of the... of what the problems were in learning and I listed a set of things which it seemed to me were absolutely essential pre-conditions. If the student is not given these pre-conditions for learning some particular... well whatever it might be; it might be an algorithm, usually an algorithm in technology, but possibly just an appreciation, the, if they are not actually provided with those conditions then their rate of learning will be greatly reduced. A great problem. And, in fact, if they then continued pushing at the students more and more information, when the first parts; if something has any structure and the first parts are not properly learned, then any subsequent material will be absorbed (if it is absorbed at all) by a pneumatic process and not by a process of comprehension. And I also began to see that very large numbers of my colleagues had, in fact, learned their subject in that way. So, in fact, they were not even equipped to convey comprehension of the subject, only content, and the way they would expound content wasn't particularly congenial to the students absorbing it. And yet they were unaware of this problem and they were overloading the syllabuses, they were overloading the students and I felt very unhappy about

that. I found that basically the whole area of psychology of learning is so ill-formed that my views on this could just be disregarded... I mean the mode of argument is very simple, nobody knows anything about it, therefore you don't. Therefore we don't take any notice of what you say. The notion that, if there was something that nobody knew anything about, that perhaps some day somebody would notice something about it, was actually absent from them it was very, very odd. At least perhaps they think: 'Well, if anybody is going to notice anything about, it won't be anyone I know', or something like that, which is rather reminiscent of Reich's book, what's it called:... 'This Little Man'. I mean Reich is very indignant in that, but you can see that he had gone through a lot of that stuff. But ... the result was that I was very, very uncomfortable and also I was under a continual barrage because I held a named position as Professor of Engineering Mechanics and it was therefore expected that I.... basically that's a name, you know, engineering mechanics just a name for a position, but people were arguing: 'Well, since you are Professor of Engineering Mechanics you have.....' Whereas they would think they knew what Engineering Mechanics was, very few of them are at all versed in Mechanics. They know the Mechanics they learned which is actually first second year level, most of them. Very few of them actually did Mechanics throughout the whole of their studies, they only knew a little and they wanted that little reproduced in the course, much as they had it. And that, in my opinion, was just what was not needed, virtually teaching people Mechanics. But I found that I was under stress because, I could neither teach the subject as I

thought it should be taught, nor could I arrange the teaching procedures as I felt they should be, and at the same time felt under pressure to simply do what is being done in the university and I didn't find that I could accede to that pressure so eventually I re-located. Walter Perry was quite sympathetic, I mean... you know.. I was treated with reasonable sympathy most of the time, but I felt that I became fully estranged when I made it clear that I wasn't going to toe the party line and there was a lot of ostracism, petty... you know.. nobody was actually standing up and slandering me, but there was a lot by implication and innuendo.

Interviewer

Probably easier to go along with the crowd.

Mark

Yes.. It wasn't that bad, I don't feel at all self pitying about it.. I found it completely impossible to explain my point of view to the Dean, because he would just simply listen to what I had said, tell me something else which he said I'd said. If I said: 'No that isn't what I've just said' he'd say: 'Yes that is what you said'. So he never found out what I was saying.

Interviewer

So you're saying that he misunderstood really.

Mark

Well, I was saying that he made no effort at all to find out what I was saying. When I was trying to say anything to him, his major reason for listening was to try and find a way of rejecting what I was saying, so he never found out what it was that he was rejecting.

Interviewer Sounds an impossible position to be in.

Mark Well, that's the normal situation in polemical intercourse. That's why I said earlier that I don't think that the exchange of symbols is communication. I think there are two processes: there is polemic and there is communication. They don't mix. On the whole polemic is not communication. Actually Norbert Weiner he.. I found quite recently I was looking through one of his books and I found that he had a chapter in there called 'The Two Uses of Language' and was pointing out that the language of the law court is not a communicational thing, which it isn't. And he was quite pessimistic with regard to social affairs.

Interviewer But one does find that lawyers or circuit judges do try to communicate with individuals who are not of the same profession in the same way in which they conduct a court procedure.

Mark Oh well, it's very difficult talking to lawyers. It's very interesting to look at the results of marriages of lawyers. They tend to treat their personal relationships as one of cross examination and they will tend to break down their own personal relationships.

Interviewer They tend to come over to me as very cold type of people, steely eyed, and almost pronounce judgement on you. If they say something it's almost law.

Mark

Well you know, it depends what they're pronouncing on. It's just the same.. You know, the legal mode of using language is definitely not communicational, it's a mode of power play and you know.. it's futile, it's basically an arbitral procedure, you know. The person who has got the best set of tricks wins the argument, but the point is, if the argument actually stems from some deep inner disquiet in the person (as it might in a lawyer's wife) or in a lawyer himself, because he's going to end up with a deep personal disquiet. .. then who wins the argument doesn't actually get to the root of what is wrong... And there's a saying, and Gregory Bateson quotes it there..... The saying: 'God is not mocked,' What it means basically is that we may not know what is the case, but there is something that is the case, and if we actually fiddle around with our language and we give primacy to this opinion or that according to the outcomes of their arguments. It still doesn't affect what is the case, it still goes on being the case, and the fact that we don't know what it is doesn't mean that isn't actually operative. So I came over here, and I still feel somewhat uncomfortable, because I don't um.....

Interviewer

What's your position at the moment?

Mark

Well, what I have been doing is going over and over this material which spreads a very long way, because if you begin with the notion that ... Well, I would say that the overwhelming preponderance of human problems is the type of problem that actually makes people feel miserable and worried, frightened and anxious and indignant, all these things that prompt people

to action. If one begins by thinking, well, is it possible that the whole structure of these things derives from a misunderstanding of the uses of the language: has become socially perpetuated, become embodied within the modes by which we actually construct our language, and the modes by which we teach our language to our children they you begin to look very, very deeply and you find that um... whole loads of things come into question, like the bases of Logic, the bases of Mathematics, the bases of Physics, and so consequently the thing doesn't stop; it isn't within the simple sort of circumscribable do dah. One can write snippets, but I don't fancy writing snippets because the current type of scientific paper or book is usually written but cutting out a section of affairs, and saying we are concerned with just this and we are ruling out this, that and the other. Whereas in fact, if you begin to look at things in their inter-relationships you find that there is no way in which to proceed, you have actually to have a much more holistic approach and the problem again, is the academic subjects or subjects generally (whether one regards them as academic or not) then become compartmentalised in conventional boxes: so that people can say, I am a something-ist or a -ologist or I'm a practitioner of this, that or the other, and it's nameable and it's defined and it's compartmentalised and if you think well, it's the actual structure of compartmentalisation that is at fault, then you see that any... well, if you begin to talk about this you are bound to be treading on everybody's toes. Whatever compartment you go into, you will find that the knowledge that, say, somebody who is a biologist has in Physics, comes

through some medium like 'New Scientist', which is written by people who are about the same kind of ... you know they're basically scientific journalists and you find that there are in fact, very, very significant revolutions in the Cooney, Thomas Cooney sense, going on in a considerable number of existing compartmentalised subjects at present. And there is a unifying pattern visible over all of them, but it's not visible to anybody who is engaging in them because they haven't looked in the other places. Because, in general, to get to this point of the revolution within any one subject requires a lot of study of that particular subject, they virtually cut themselves off from the jargons of the other subjects, and the result is that you can have something which is a current point of orthodoxy in subject A, and know to be such by the practitioners of subject B. And there may be a revolution going on in subject B, and there may be a revolution going on in subject A, and you will only be able to carry the point about the revolution in subject B if you don't meet the allegation that is in contradiction to this point of orthodoxy in subject A. Because it may be because the point of orthodoxy in subject A is being challenged at the same time, but you can't even refer to that challenge to people who don't know what's going on in the subject, and it's more complicated than that because it's subjects A, B, C, D, E, F, G, you know, and they are all inter-related and um.. so consequently I'm .. First of all, I continue to write snippets, to make tapes with Brian, and continue to think about whether to write anything up on this. But one of the other things about it is that the outcome of thinking sufficiently deeply about it is to make one realise that writing

things up isn't even the thing to do. It's very difficult you see, if you say that, then it is very difficult to say what your job is. (Laughter). So that's the discomfort with which I live at present. I'll probably write something anyway because I find that there is a very strong urge in me to write something. Every time I start to write it, in a few pages I can actually get myself round to a position which shows that it's pointless to write it, and it's not the thing to do, there's something else to do. Then I find it very difficult to do that thing.

Interviewer

It's easier to put it on tape.

Mark

Yes well, the problem is that um.. it tends to take a long while. There has to be a very, sort of, living process in one to have the ideas come up, and they come up in a very, sort of, rich pattern. It's a rich pattern, and it's also strange because the pattern is rather largely cut-off by our habitual use of the language, so that it's rather difficult to articulate and um.. also very, very slow to articulate and if one has a very large network of um... or actually if one has a sense of process in one's head about a certain type of consideration, one has this large sense of process then um.. one can contemplate that. If one reaches for a pen and starts to write, then the writing is so slow, the business of writing the first sentence is so protracted compared with the speed with which one thinks, that one has to begin to disrupt the actual um.. just the perceptive or the cognitive process of thinking about it. One imposes a very, very inimical rhythm on it by beginning to write, which actually tends to... takes so long

to write the first point down, that the point that one was going to get to begins to recede and points further away in the large structure, it can't be got to at all. So it's very difficult to write, and there are some things that are incredibly easy to write.

Interviewer

You can visualise the process?

Mark

Oh, I could write technical papers very fast because you know exactly what you are doing, the structure of it is dictated by the inner structure of the technical matter. I could always write technical material very, very quickly indeed, if I didn't have to think whether this was the thing I needed to be writing or not. But this is um... in a sense this material could be seen as technical but it isn't technical in the pre-existing sense, so um.. the way of trying to get to it is quite different, you can't just write down something to which everybody will agree and another thing with which everybody will agree and say: 'Therefore' It's um.. very largely it challenges a very large number of things that people believe because that's what people tell each other, and the fact that people tell each other things, of course, has nothing to do with whether the things have substance, but they will come to have a kind of substance in that they um.. the conviction in people. One of the things that I felt as very significant was, I began to see some very, very deep fallacies at the root of Physics. Very deep, and I began to see also the social dynamics of Physics and the way that these things were sustained within it. Largely, the prediction of the physicist

for the expression of anything that he is going to regard as an adequately presented theory um... in a form largely in the form of calculus of some sort: but the most important calculus in question being those of Boolean Algebra on one hand, and effectively um.. the real number analysis, the theory of real numbers and the analysis growing out of it, into complex variable theory and the like, um... based on, basically, the real number line. There are deep fallacies relating to the real number line and there are deep fallacies in Boolean Algebra, and extraordinary elaborate bodies of physical doctrine which can be built up which um.... which are in a sense quite apurious. They do have technological output, which is undeniable and is neither here nor there, but the point is basically Technology is not Cosmology, and Physics at present forms the background for most people's Cosmology, I mean, you may not..... I mean you may have.. Well, you do have, say, a Christian Cosmology tacked in, but basically because of this peculiar takeover-fear of what seems to me to be their limited mode of reasoning. Very limited and specifically limited to the technological in the field of Cosmology, where one has this extraordinary division of thought into the physical and the metaphysical. You see, you know basically the idea that something is metaphysical is um.. the naming of it... metaphysical is a contrast with the physical, and you find that nearly all the arguments about Cosmology are categorised culturally as being metaphysical. The physical aspects of Cosmology are virtually decreed by a self-elected geophysics. They don't see it that way, naturally, because they all believe each other to be critically aware, but um.. I don't think they

are and um... I found you know, that nearly everything that I've noted about this, has been noted by other people. I mean, Alfred North Whitehead um.. make a remark which I only found out about two days ago. Acxtually, I've been saying it for some years, I've been saying that the claim, the mathelological claim that supports the um. This claim for observation observability. And yet the whole manipulative structure that the physicist uses to develop his language of Physics pertains to unobservables, that is Euclidean points. A Euclidean point is intrinsically unobservable, and it therefore has, in the customary terminology, the most extraordinary abstract metaphysical status but to um.. actually begin to attempt to frame the terminology of a subject, which is supposed to be intrinsically an observational one in terms of calculus (which is founded in terms of unobservability) is a very, very serious logical error. And I find that Whitehead said that, and I didn't know until two days ago, and what's more I've lost the source, I don't know where I read it. I can only have seen it in two or three books, and I daresay I'll find it. If you say that kind of thing to physicists they will say: 'Oh yes, but you know that's only a very good approximation', but that means that they haven't seen the logical point. The logical point is: if you actually start off without making a hash over observability, will your Physics even start from where it started before, and will it even go in the same direction? If they say: 'Well, you know, we don't care about this direction business. We know that we want to build cyclotrons, or we want to make aeroplanes', or something like that (mind you, you can make aeroplanes but

the thing is, if that is what you are after you won't get any insights into Cosmology) um.. So when I see and hear people talking about physicists reviewing the modern discoveries in relation to Cosmology, it just makes me giggle. It's just that they just don't know what they are doing.

TOPICS IN THE NEWS

Interviewer To revert back to the topics in the news Mark. How interested would you say you are in current affairs?

Mark Now? Well, I mean, I know that current affairs is like bad weather. Um.. I'm, about as interested as I would be in the weather forecasts. Which is, and I mean to put it clearly, I don't bother to look at the weather forecast very often. Last year when I was thinking of going to India and leaving my wife at home for a month and the Russians at that time were doing massive exercises along the Polish border, I was a bit apprehensive about going away at such a time, but um.. I mean obviously one can't but be aware of current affairs in so far as they are causing a great deal of unemployment and, this is present in the village, you know.. I mean obviously I'm interested in the things to the extent that raindrops call fall on me and economic cuts can fall on me, but um.. the thing is that I no longer have the attitude towards current affairs that I once had, which was trying to get a grip on everything so as to be able to outguess the future, or .. you know either

move where the trouble would not be, or change people's policies or something of that sort as I think most people I think do. But on the whole, I found that if I tried to immerse... well at a certain point.. as I say I think I really was... I saw through this business, the social, um.. the social mess as it were, um.. all in one sort of go. My whole attitude towards current affairs changed at that time. I see that though one needs to um.. for the sake of just being able to converse with people in their ordinary domains, of small talk, I am aware of certain aspects of current affairs, but I don't regard it as very important any more.

Interviewer

So you wouldn't say then that you are particularly well informed?

Mark

No, I would say that, in general, if I wanted to become fairly well informed on anything, I would be able to do it very quickly, um.. in so far as the information was available. Of course, it is a feature of current affairs that in general as problems begin to become one of great public interest, the amount of information about it, that is unambiguous - diminishes - and the amount of misinformation increases tremendously. But um.. Whereas earlier on I was very concerned to get lots of sources and try and see what the consistency and inconsistencies were, so as to reduce those ambiguities, now I see that there is very little point in doing that. That even if one really wants to help, one doesn't help by dashing off and doing something dramatic, one helps actually by concentrating on oneself, I don't mean concentrating on

oneself in an egotistic fashion, but noticing that really that the only things that will happen in the world as a result of one's own action is um.. happens through transactions that one is involved in and so um. consequently it's a question of finding out how to transact one's affairs with other people. And every time that one interacts with someone else in such a way as to diminish the aggregate of anxiety. I think one is actually making a very definite contribution to that person's peace of mind (and to one's own), and that's the way that things can change. It's a... we have this notion, the managerial notion, that some kind of order is to be decreed from the centre and then the periphery is to conform to the centrally decreed order.

Interviewer

Right. Continuation then Mark from Tape 2.

Mark

Yes. Well, the periphery is to conform to the centrally decreed order. Now the thing is, that the centrally decreed order is usually transmitted to the local peripheral, or the local or the distant, with very, very poor knowledge of local conditions because it will be trimmed of course by the processes by which these things come about. It will be trimmed by all sorts of objections couched.. framed from different standpoints of ignorance and when the.. the central decree reaches the locality, in general it doesn't fit, and the only kind of social order that people do seem to be able to consider is one of somehow obtaining either some way of making the decrees so that they fit better, or force fitting them in the locality by saying that the locality must conform. Just pure coercion

um.. and it doesn't seem to have occurred to the culture that there may be a local rule that is.. not a rule exactly but a.. there may be a local phenomenon by which in each locality transactions occur according to a different mode. Then a global order can go out and local orders fit together quite spontaneously to produce it, just because of the nature of that order; and I happen to think that is the way that things can change. Umm.. it's largely to preoccupation with these central orders and um.. that constitutes all the anxiety stuff. um.. I mean I can set this out at quite considerable length with mathematical models and what not... but um.. but basically what it comes down to is... that um.. I mean basically you can see that if every family in a nation was actually in a state of each um.. each member of a family in a state of equanimity and family as a whole was in a state of equanimity, then it will necessarily be in a state of equanimity with regard to its relationship with neighbouring families, and you can continue that until you can close the circle on any magnitude. Now um.. the crucial thing about it is that it begins with the person, it doesn't begin with a central decree and um. the difficulties and the obstructions to this generally, and the obstructions prevent people from actually relating to each other in ways that do actually produce unanimity, equanimity and serenity, usually are the obstructions, are the intrusions of these distant orderings, something... When I say distant it may be because it is actually government decree, or it may be because it's the social convention that is so intense that to flout it means to invite retribution from society. And once the society.. if there is any behaviour at all which um.. which

the society insists upon which is counter productive socially the that will be instituted... well, it will be instituted within that society and that society will not be able to escape the consequences, and basically, if one can see that the society in which people did not find it necessary to temper any tendencies they had to generosity by prudence, then the generosity having full reign, you might well then find that you have a society in which there is no scarcity. I mean obviously, if I know that I live in a society where people are intrinsically generous then even if I have, say, ten pounds and I somebody who says! My goodness I'm in trouble I need nine pounds' then I'd be quite happy to give it to him, because if I found that I was short nine pounds later on I would be able to say 'My goodness I need nine pounds' and somebody would give it to me. No worry, if you have a society which is gift oriented then problems will go away, but if you have a society which is actually prudence oriented then people are going to hoard things and there is going to be a palpable scarcity. Now you know.. that change comes within people, but it is very difficult in an environment which is created by prevailing attitudes, which is only, after all, a rationalisation of meanness in a certain sense. It's a question of who bears risk.

Interviewer

John's concepts. Yes.....

Mark

Who bears risk, if people are frightened by risk then you're going to have a society which is very defensive, very rigid and absolute hell to be lonely in. um.. because people are

going to be very complex, very manipulative, very defensive, very mean. um..

Interviewer

Quite lonely I should think.

Mark

Well, they are going to be lonely, but it's their loneliness that gives rise to their meanness. Because basically, you know, insurance is for the man with no friends. If you've friends what do you need insurance for. Um.. (Laughter). You see the society that we have is such that childhood tendencies towards generosity are very quickly deterred um.. and there are many, many things, if you go into any area where there are fairly sharp ethnic or social disputes and you are seen by a person of one particular biased persuasion to actually transact with the person of the opposite persuasion, then you can't transact with him. And I have a friend who is very at ease and capable in fact of getting on pretty well with anybody, he hasn't got any quirks he hasn't got any rigidities, he's very competent, he's very competent with his hands, he can always do things that people want done, and um.. very, very quite fellow. And he moves around the world a lot because he finds it very easy to move to different countries, and he found when he came to muslim countries that he couldn't do much about it, the fact is that the social structure is so much based on um.. a kind of feuding vendetta system between families, that you're literally in a situation where to say, 'I am the friend of one man' is automatically taken to mean you are an enemy of another. So you can't say, I am a friend to both of you, because their conditions of friendship is an alliance

of enmity, and again, anybody who mistakes alliance for friendship has had it. A man who seeks out allies can't find a friend. (Laughter).

Interviewer

So it would be impossible to be well informed really the, about national topics.

Mark

Nobody can be really well informed, I think, because um.. you have only to look at the scale of the information gathering problem and all the distorting systems that are at work. You can know what is in the papers, you can know what is on the scurrility network on the grapevines, but I think this characteristic of, sort of, official knowledge and scurrility is characteristic of all the hierarchy organisations. You'll find it in every place, if your complaints can only go through official channels, you can be sure that there is going to be an awful lot of gossip on unofficial channels, because, you know, the whole point of having official channels largely is so that you can prevaricate on them. (Laughter).

Interviewer

O.K. then Mark. Thanks very much indeed.

Mark

Right. Fine."

TRANSCRIPT 14Interview with NevillNDVIEWER

O.K. then Nev'l, how do you see the situation in Poland at the present time?

L

That's an unexpected question, the situation in Poland, well the trades union movement, let me think, gained some influence because the Solidarity union was founded about a year ago, or at least started to be effective then. On the other hand we haven't heard much about the reaction to the latest set of price increases of which there were, um.. I remember read being mentioned as having tripled or something like that in price about a week ago, and I haven't heard anything about reaction to that so I would guess that it is early days for this current phase, the other thing is that the Russians are alleged to be performing exercises on the border and waiting to come in at any moment and nobody really knows what the truth is about that.

VIEWER

So would you say that Russia is a potential threat to Poland?

L

Yes I think so concievably^{ly}, I mean obviously if the situation there got so out of hand that they couldn't predict at all what is going to happen they would be worried because it is a country on their frontier and they would put a squeeze of some kind on Poland, but at the moment it's attempting to be only if you like, political noises and going and holding their hands and saying things, they haven't got too far, they've published some critical.

IEWER

What sort of squeeze do you think they would put on?

Well they might, I would imagine they dont want to take any military action until they are absolutely forced to that nothing else would work. But so that short of that they can make threatening noises and apply political pressure of

one kind or another and maybe marching up and down the boundaries is something that they can well do, and I should think that too they could encourage the East Germans to do something similar from the other side, from the opposite border.

VIEWER

Would this be in keeping with what they have done in other countries?

L

Well it would correspond, the forms that the pressure have taken vary from one country to another and obviously there was pressure in both Czechoslovakia and Hungary.

VIEWER

Can you elaborate on these forms?

L

Well in Hungary they drove a lot of tanks in and took over the Capital city more or less or claimed to be supporting the official party government of Hungary. In Czechoslovakia it was something rather similar.

VIEWER

Do you um.. can you sort of outline what you think might happen in Poland?

L

Well it's guess work isn't it. One of the main problems in Poland is that they have, they are considerably in debt to various countries in the west as well as, as well as within the Soviet block and um nobody quite knows what is going to become of that, but that is the different problem from the ones that applied in the other satellite countries. The Russians may or may not want to take the responsibility for those debts which they would have to if they were to impose this kind of direct rule in Poland, and of course the other question is that they put their foot in it rather in Afghanistan and they got up a lot of people's noses over it I think, and that has possibly led to a bit more caution over Poland than there might have been otherwise.

NCE ON TELEVISION

VIEWER

Right changing the subject, have you got any views on violence on television or in television programmes?

LL

What I feel about that is that there are good reasons no doubt for not having too much violence in the daytime when you have got very little control over who watches it but the policy of reserving there for the violent things, at the moment they make a break point at nine o'clock at night I think that possibly it should be later in the summer months when I have noticed that kids of sort of ten, eleven, twelvish tend to stay up a bit longer. So I would have thought it might be better not to have anything too strongly violent until say after ten thirty at night, but the idea is that parents at that time will be supervising who is going to watch the things and therefore they can take their own responsibilities. I am not in favour of banning from T.V. altogether, I think that you have to assume that the audience is capable of behaving in an adult way and making its own decisions about what it watches. . But apart from that..

VIEWER

I mean can you give me an example of what you would call violence?

L

Well that's now.. you have reminded me of the other thing which I was going to say about violence and that is of course, that what constitutes something violent is relative, we might have thought things were very violent indeed thirty or forty years ago, which are now accepted as common place things. Because you see the thing go on so often on T.V.....

VIEWER

Can you give me an example?

Well at one time the Hayes code didn't allow any blood to be seen when anyone was punched or shot, whereas this is now commonplace that you do see blood and of course, everybody sees everything in colour, most films were black and white in the.. before about 1950 colour films were only used for musicals or things like that, you know even westerns weren't in colour and certainly they weren't gory, whereas now that has

been, if you like things that were introduced with an idea of the shock element and that all in the early days had 'X' certificates, now are accepted as being fairly commonplace things on the screen. But what's commonplace on the screen might still shock you if you saw it in real life, and the other thing is I suppose, that you do see a different kind of violence in news items, we see the um.. a lot of newsreel film from Northern Ireland and from other activity centres where battle is going on.

VIEWER

For example, the riots in Brixton or Toxtieth.

L

Yes that's true, you didn't see anything very terrible going on there, but there were.....

VIEWER

Implied violence, well I suppose not implied it was actual but it was shown in newsreel or the news film.

L

Well I think the difficulty is that in really hot moments the photographers couldn't take in many pictures and also they did get their cameras broken up on one or two occasions and generally they... it's the kind of mopping up stage of the thing that you tend to see and I get the impression. It's of course, very difficult in the television news bulletin to develop a true historical if you like or, a thread of narrative through the proceedings so that you can really see what is going on and it has to be supported by what the commentator is telling you.

VIEWER

Would you say that sports like boxing, fencing or judo or karate are what we could call fringe violence?

That's an interesting question, those are things that have been established a very long time as sports, and of course judo and karate weren't so much practiced over here until the last, I don't know fifteen or twenty years perhaps, but certainly boxing and fencing are things that have gone on for centuries and they were always accepted as sporting activities although

there is some unsportsman like conduct at times, I don't think in the ordinary sense of the word they represent violence no, they are done within the framework of rules and it's very hard to think whether they have any influence on people's attitude to life watching those things goodness only knows but I would have thought they were more important to the participants than to the casual viewer, again however, I mean, if you're not interested in that kind of thing I suppose you just switch it off and walk away and um.. some people do that, but I wouldn't have thought they were really part of the development of violence as such.

VIEWER

Well you have said in actual fact that boxing has been going on for centuries, it's still going on now, so wouldn't you cede the fact that it has been a sport for say a couple of hundred years, wouldn't you see it as the development of violence?

LL

No I should say that as a sport it has passed its zenith and the amount of importance that people actually attach to boxing is very much on the decline, that the professional fights don't attract the same kind of audience that they used to, I mean the same size of audience really, not the same kind of audience, um so I would have thought.... and there are so many other forms of violence if you like, the violence depicted of fictitious crimes and the greater reporting of skirmishes, one of the things about the amount of violence that you see in newsreels is that every theatre of trouble throughout the world gets reported and they are all concentrated into one half hour news bulletin a day perhaps that the person that watches. Now we didn't watch that amount of news in the past the newsreels in the cinemas was maybe eight or nine minutes and you saw one of those per week so the in a way what I am saying is that the more intensive news coverage by television tends to mean that you see far more of what is going on, whereas the number of boxing matches that take place of any given standard is about the same as it always was, so far as I know it's no different now from what it was fifty years ago lets say. So therefore they represent a much smaller part

of what people see of that kind of activity and I would have thought that they were less significant in people's minds now than they were at the time Sugar Ray Robinson was the middle weight champion, whenever that was - about 1950 I think.

VIEWER

But would you say that all these forms of violence contribute to violence within families?

L

Well it's possible in individual cases. My feeling is that a majority of people make a distinction between the way that they are prepared to act towards people they don't know, the great nebulous outside, or the people, the world at large of whom they may be afraid in some sense because there is no direct communication and they would in their minds be prepared to act violently toward those if there was occasion for it. Some people I think are aggressors and others are only retaliators in that. But you tend not to be aggressive or to retaliate violently within the family unit, again most people, some people do bring that kind of behaviour into the family, but most people look upon the family as being a haven of comparative peace in which everything is on a much smaller scale for one thing but also in which those latent aggressions and uncivilised behaviour if you like, shouldn't be necessary because you know each other well and you can communicate to each other, the opportunity is there to talk things out, and that would be the usual way of doing it. I mean obviously there are feelings of hostility in some families that grow up either because people who started out being fond of each other cease to be, or various other things can happen and between siblings not every thing is necessarily harmonious, but despite that in the majority of families on the whole peace reigns and true violence in the ultimate sense isn't the majority way of behaving I don't think. But I see it as a fundamental error that some people who, granted that most people are prepared to be hostile to the things that they know nothing about, I see it as an error to introduce that into the family and what I would prefer to see people doing is to accept that because it was possible to communicate without violence among people that you know well and like, then it should be possible with everyone else and that the friendliness that goes on in family

circles is something that you would hope people could extend outside, or accept at least that people they don't know are likely to be just as reasonable as the ones that they do and therefore treat them accordingly.

VIEWER

Aren't you talking about an ideal state?

L

Well in a way, but I'm saying that everybody can be their own ideal and the more people that are, the better the state becomes.

ONING/SOLAR ENERGY

VIEWER

The other weekend a fellow crossed the channel using a balloon and solar energy, I don't know if you read about it?

L

I heard about it.

VIEWER

Well he did it in about two and a half hours or something like this, do you see ballooning as a form of transport that might catch on for the future?

L

As a majority user - no, but there might be specialist adaptations that could be viable. I think just in the same way if you like, that we aren't going to see the canals as a major force in the transport of goods in this country again. Perhaps I speak too quickly there, that may be premature, but anyway lets say that in the next twenty or thirty years at any rate, nevertheless there are some particular uses like the bulk transport of china clay or something of that kind, which are quite suited to canal traffic, but they are minority uses and I would imagine that balloons would be in the same general bracket as that, that there might be particular uses for which balloons are a good idea, solar balloons but not as a majority. However, we are facing the possibility that.. well we know for a certainty that hydro-carbon fuels won't last for ever and the number of alternatives must be explored and among those, whilst the most obvious of existing technologies, to replace that is I suppose electric railways because those.. we've got the technology already for both creating the electricity and for running the trains. All the same solar energy, solar

powered vehicles are possible runner and so for that matter are the canals and it maybe that barges being less fuel intensive than many forms of transport and you could have a revival for that reason. That's why I had reservations about that after I.. while I was in the middle fo saying it.

VIEWER

Do you know of any canals that are being used at the moment?

L

For freight?

VIEWER

Yes.

NEVILL

Well there are canals, they're mostly esturarial bits um but there's about forty or fifty miles of canals, I've forgotten them now, I've got a list downstairs, but I couldn't tell you exactly where the majority of them are that are used by freight navigation, of course, the greater part of the canal system is recreational.

VIEWER

Solar energy has caught on in the form of solar heating especially with projects running up here so obviously there must be some market for this sort of resource.

L

Oh sure. I don't know whether the news item said, I haven't heard it, I just don't know how much it costs to set up a solar balloon, but of course, at this stage of the game it's a prototype and how cheaply you could make them for everyday use goodness knows. But obviously if you have thousands of the things then you are going to have a problem with air traffic control and all of these things would then have to become intently regulated but in.. air space funnily enough isn't all that plentiful because of the high speed of the existing airlines that operate and those may fade a bit, we have heard of British Airways having to cut down some of their internal routes, all the same we are a long way from people just being able to use balloons for everything.

THIRD WORLDVIEWER

Have you got any ideas now on the development of the third world, politically and economically?

LL

Well it would be easy to say no wouldn't it (laughter) economic development - the problem of economic development of the third world is that in the past we have thought in terms of mechanising the agriculture and a kind of industrial revolution now in a way industrial revolutions worked in a minority of countries because they could, having got to a point where they could produce far more stuff for the same amount of labour and input, sell it to every body else who didn't have any industry, but when you've got to the point where more than half the countries in the world are industrialised then the market for the remainder to industrialise isn't quite so obvious and the prosperity that might come from that isn't so great either, so if every tiny country in South America or South Africa or North Africa for that matter, and the minority neighbourhoods of Asia get to produce all their own manufactures then, those of us who have been producing those things before have got to make things that they can't make. But eventually you run out of ideas of things that are worth making or that people are..... I mean obviously there are always new inventions, but there isn't; we have suddenly discovered, going to be a perpetual increase in prosperity for everyone, therefore, the people to buy all the new inventions will be thinner on the ground and maybe more attention should be paid to getting back to basics, that is to say, trying to provide enough food for people to live on.

VIEWER

But you would see that Britain's role in how to help the third world countries is probably how to produce more food?

L

Well it could be that, we have exported agricultural machinery in the past, but in a way we have got so many troubles of our own that we are not really in a position to help anybody else and perhaps the best export we can offer to most of the third world countries is something like twelve percent unemployment or an economic system that produces a very unequitable distribution between members of the public, I mean I don't think

that we've got all that much to sell people at the moment, we need to put our own house in order first perhaps.

INTERVIEWER

Right um..

LL

There are however, technological ideas that we could give people,

INTERVIEWER

Well such as?

LL

Well I mean, you can sell people anything that they want to buy of course, but there is expertise in the production of well both in computers systems and that sort of thing and all those kind of industries and in more advanced methods of agricultural production than are in use in, if you like, half the Indian continent. Not all our methods are suitable for over there because they were developed under British climatic conditions which don't really apply exactly anywhere else, all the same there are things there that people could maybe learn from us or adapt.

GER STRIKERS

INTERVIEWER

Right. I expect you've heard about the hunger strikers in the Maze prison.

NEVILL

Yes I have.

INTERVIEWER

I don't know if you are in sympathy with their cause, but do you think that prisoners should be given political status?

LL

No I would agree with the government line which says - to the extent that it says that there is no such thing as political status because we don't have such a thing as political prisoners. It's never been the policy in Britain as far as I know and I wouldn't support it as a policy, to imprison anyone for their political beliefs as such. People have been in... those people have been imprisoned because they contravened the laws about carrying armaments, or in some cases

did worse things like blowing up public property and that kind of thing, which are contrary to public order and are just regarded as unacceptable things, but are explicitly illegal for one reason or another and they weren't imprisoned because of their political beliefs. What I do think is right is something that people like Cardinal McFee have said that the British could look to prison conditions in general and make a number of improvements in the lot of prisoners. I don't think there is any advantage in treating prisoners in an inhuman way or expecting them to do things that are basically uncivilised. I don't see that those have any reforming effect as such and certainly constant review of what goes on in prisons, and thinking about the therapeutic effect of prison service should lead to conditions in general in prisons to be more humane, but that has nothing to do with which prisoners you're talking about or why they were imprisoned, that should apply to all prisoners.

VIEWER

I mean you would see these people in the Maze prison, I mean the folk who are on hunger strike as terrorists as such, would you?

L

Well it depends whether they have been convicted of terrorist offences, I think you can only look upon a prisoner for the offence of which he was convicted and not really what his intentions were at the time, you've only got his word for that.

ES

VIEWER

O.K. Right Nev'l have you got any particular hobbies or pastimes apart from your job which really turn you on or interest you outside of the O.U.?

L

Well yes. (laughter)

VIEWER

Says he with a grin on his face.

L

Well that's right, I suppose if you can't grin about things then you wouldn't have a lot of interests. I have a lot of interests in music which is nothing to do with my O.U. work mostly as a, you're not a spectator in music you're something

else - a listener sport.

INTERVIEWER

Which aspects of music? I mean can you outline that?

LL

Most recently the things that I get most enjoyment from are, I think - chamber music, that's small groups of players if you like, rather than orchestral, and rather than say opera or a big stage works. um.. the great part of my listening of course, tends to be radio and to some extent records and tapes and in recent years because of the technological revolution, if you like that has made taping programmes very easy I have in some composer's work which interested me, made recordings of a number of different performances and then tried to compare them, and that you know, gives you an insight into the detail of the writing that you wouldn't otherwise have, so I found that quite an interesting study.

INTERVIEWER

How have you gone about doing that though?

L

Well simply I think, where you've got a... well no not necessarily, where you see that a piece of music is marked in the Radio Times as being about to be played and you think "oh I like that piece" or "oh that composer, I've liked his music before and I don't know that piece I'll record it" and then it more often than not seems to happen that the B.B.C. programme planners come up with several performances of a thing over a short period of time. So that when they... you very often can collect three or four different versions, now sometimes when you compare those it is quite obvious that one of them is much more stylish than the other, sometimes too, you make a botch of the recording in one case, and in that case you keep the better recording. But um.. sometimes there isn't all that much to choose, or the performances have qualities that balance each other out, one is better in some respects and another in another, or so it seems, and obviously, to some extent those differences are subjective and to some extent they are not, and that's a problem that has always interested me to the extent of which the choice of quality in music as well as quality in performance can be held to be

subjective and to what extent there are real things there that you can pinpoint and that you could describe, where you can say "well this chap has clearly got a better technology than that one". So those are the things that can come out of that study and you learn more about the music itself of course.

VIEWER

And about the composer?

L

Well yes about his method of composing certainly, and how he structured the thing and put it together. It's very often the case that some performances convey an idea of structure which is absent in others and that...

VIEWER

What do you mean by an idea of structure?

L

Well that you sense structure as you listen to the thing through, it seems to have a shape to it. from one end of the... from the beginning of the movement to the end you get a sense of continuity and flow and shape and form if you like, whereas in others you feel that it isn't leading anywhere, or you it isn't obvious to you where it is leading and that's sometimes simply because the person who plays it with a sense of form, is one who has lived with that music for a long time, he has perhaps had it in his repertoire for fifteen years and always liked it and so he is constantly giving performances and he learns more about it as he goes on through his career, whereas the other chap is more or less sight reading it as it were, I mean, a bit better than that, but the performance is not so well prepared because the people haven't... or you get a group of people playing together who haven't been together all that long or all that often.

VIEWER

What other interests have you?

L

What other interests have I - well theatre and dance, I have attended quite a bit, you know those are the things that you don't see so much on, well you can see some drama on television...

VIEWER

Which aspects, I mean is it dance technique?

LL

No I don't think so, it is the expression allied with the music, where they use music or the sounds where they use sounds as a background to that, but I would have thought that it was the idea of expressing emotions and other things to perhaps, but essentially.....

RVIEWER

Well such as?

L

Well just activities if you like, through mime usually, use a symbolised method of body movement there to express activities, but to express emotion is more a matter of body style, but expressing that through a body movement is very interesting so that the... that's the role of the choreography in way, and the role of the dancers themselves is physically carrying it out.

RVIEWER

What about theatre?

L

Yes sure, um.. there have been some quite interesting revivals of plays written around the turn of the century lately by people like Wilde and Shaw and so forth, which we have followed to some degree and the other thing is that small companies tend to be thriving as opposed to very big ones um.. in the provinces. Because I don't get to London very much

VIEWER

So it's more support of theatrical companies than what you are seeing?

L

Oh no I wouldn't say that. No the play is important of course, but the way in which it is done by the various fringe theatre companies and the kind of stuff they put on - experimental theatre if you like, yes it is true that a certain amount of it is in the style rather than the content but you can't divorce those two things, they are inextricably mixed up. But it just is that in places like Northampton and Coventry, you see far more good fringe theatre than you do good straight

theatre.

VIEWER

Yes, I mean what do you personally gain from fringe theatre as opposed from straight theatre?

LL

Well I think the fact that if you like, we are all familiar with what straight theatre consists of, so that you know the kinds of thing that good actors can add to a play over and above just reading the script, but with fringe theatre, they are experimenting with different blends of different techniques and different amounts of each and different kinds of inputs and different noises and cacophonies, methods of banging and one thing and another and all those are slightly different styles of putting an idea across and sometimes they work and sometimes they don't. But by following those, well it is interesting when it does work, because you experience something that is inventive itself as well as the inventiveness of the content of the play. So you are gaining experience at two levels rather than one in a sense.

VIEWER

So those are your three main interests?

LL

That's hard to say, I suppose there are others as well, but those are the three things that I have spent most time on I think.

VIEWER

What other things are you interested in then?

L

Well I've always been interested in.. now is this part of my work or isn't it, that's a question. I've always been interested in transport - that's public transport particularly, and the way it operates and um.. the economics of it, now in a way that is a discipline interest but the work I'm doing at the moment isn't directly related to that I suppose. But I do tend as an ex-methods study man, to notice things that are going on

and those are the fields in which one is, well let's say you only have to have a long wait between trains at a connection to start trying to figure out how they could make the delays less annoying.

INTERVIEWER

Especially at Long Buckby?

LL

Well we don't change trains at Long Buckby, if you have a long wait there, it's either because the train is late or you've missed it. (laughter) and missing it is on you, whereas the late running is I suppose, you might think about that a bit, but the last two or three weeks that hasn't been a major problem. They've cleared up the track works that they've been doing, so things are a bit better just now.

CE TO SOMEONE GETTING
IED.

INTERVIEWER

Right O.K. then Nev'l, I'll turn over the tape. Now Nev'l have you got any advice that you would give to anybody getting married?

L

Oh sure (laughter) how much advice do you...

INTERVIEWER

Well let's have it then, anything I mean, if you can talk at length on that, it will be superb. It's a difficult one and I should think that probably you have thought about.

L

Um.. well do you mean advice that you give to people who have definitely decided to get married, or do you mean advice on whether to get married or not?

INTERVIEWER

Well either or both, depending on if you have really thought through the problem, I mean obviously, I've not thought of both aspects, and other people haven't as well. A lot of people haven't thought about it at all. So if you have thought of both those aspects, it would be interesting to hear.

LL

Well let's start with people who are trying to decide whether to get married, in a way I don't think whether to get married as such, is the most important thing. It used to be at one time but in society as it is today it is accepted that some people live together and whether they are called married or not is only as important as it is to them really, and maybe to their families, but that's a question of attitudes. If we take the labels out of it and talk about people making a decision whether to live with someone else permanently, or at least permanently in intention at the time that they start. Yes then obviously there are pieces of advice one would give. Now there are several categories of advice I suppose and there are some things that I know that would be necessary for me, which aren't necessary for all other people in those conditions, for instance I wouldn't myself recommend anybody to embark on such a relationship unless they were confident of being able to live harmoniously with the other person and that they didn't expect to have a load of arguments about comparative trivialities, and that on the contrary most things did seem to be unimportant compared to the aspect of being together. But some people seem to thrive on arguments and really like having somebody there to argue with and there's no reason why, if somebody is like that, well if both parties are like that they shouldn't be happy together, though again my feeling would be that you shouldn't consider the sort of relationship that a marriage would imply with somebody unless you care at least as much about their well being and personal development, as you do about your own and that wants to be reciprocated really. um.. because you do need to be very much involved in what the other person is doing and helping them on their way and in ensuring, without feeling imposed upon that what you do is compatible with what they want to do. So those are perhaps the most important things and the importance of marriage as such is different for different pairs of people, so I think that the advice I would give would be not on the marriage as such, Now of course if somebody has already decided that they are going to get married, then again that

depends on whether that is just a label to a situation that already existed or, whether they mean that they are going to live together for the first time. and um.. my advice would be I suppose, well unless they don't feel about each other in much the same kind of way as I've just described, then it maybe not such a good idea. But if they do feel strongly that they want to operate together and that they want to be together, that they want to collaborate in everything that th y do, apart perhaps from work or occupations, then fine, why not? and if it suits them or their relatives or somebody else, even their income tax then good luck to them. I don't know if that summarises it adequately.....

RVIEWER

Is that the first category of people?

L

Well what I've tried to do was, I gave you the first category, but I can't remember which way I've put the categories now, but I gave you first the people who were undecided whether to get married and I just gave you a modification afterwards for people who have decided to get married. Obviously, when people have made the decision, you don't really try to influence it because it is their decision and not yours. It's only a matter of, if you think they have overlooked some of the things that are involved and trying to explain to them what you see, as a person perhaps who has experienced marriage or something like it, or has been married and has failed to experience what ought to be in it at the time. The advice that you can give of contributing your experience and theirs. Of course, most people are a bit reluctant to apply other people's experience to their own situation and therefore, the extent to which you can helpfully give advice is rather limited, but that isn't what you asked me.

MY JOB INVOLVES

VIEWER

Right can you tell me Nev'l what you think your job at the Open University involves?

LL Yes.. (laughter)

VIEWER Do you think it is a strange question? - my job.

LL Well you actually jump about rather, but that doesn't matter. The job is at the moment to maintain one particular course statistical sources, this is the main ingredient of the job. Such that students can learn from it in the way that it was intended by updating the assignments particularly and to some extent an involvement in the renewal of the last stages of main text. I mean, those who are already in um,. nearly finished that part, they are already in second draft, so the formative part of it has really ended. We've got a chunk of audio vision to remake, so there is a bit of remaking, but it is mostly maintaining assignments and setting examinations and working with the examining board and that sort of thing. That's the main ingredient of my work here, now obviously there are things on the side of that, which include um.. giving off advice on statistical matters to other members of the faculty who might want it when they request it. We have put a note in the Bulletin so that they know that, that's, to remind people that that facility is available, that's one thing. Some participation in other course work, some participation in general faculty business and another thing that I've done here which isn't part of my job, but which is....

VIEWER Do you see as part of it though?

LL No, no not really it's a voluntary side effect, you don't want to hear about.

VIEWER No no, I'd be interested come on.

LL Another thing that I have done then, is living where I do, almost on the boundary of the East and West Midlands, is to collect a certain amount of information about theatres and music and dance events, and pass them on to other people who I know are

interested, including Mike Boulivant, who is the theatre co-ordinator for O.U. and Liz Whiteleg who is the dance co-ordinator, so by feeding them with stuff that comes out of West Midlands which is on our doorstep, then they can pass on to their members or otherwise and arrange parties to go to things and I found that quite a rewarding thing to do that people take that interest.

ENT AFFAIRS

VIEWER

Going back to the news items which we have discussed, um how interested would you say you are, or have been in current topics in the news? Are you very interested?

L

No. they're really on the fringe, I mean I've got to get my personal commitments right first and I obviously.. news events are important when they impinge directly on that, but so long as they are outside your personal lifestyle and you can't influence ~~tem~~ directly, then you listen to them with interest, sometimes with horror, but it's no good letting them be too big a part of your life, otherwise they'll swamp the things that you're trying to do yourself and it gets out of hand.

VIEWER

You say you've got to get your personal commitments right first, I could take that two ways, either that you're being.. your first priority, that the first thing you consider. Or you have got things which you think should be put right.

L

Well there are things in my work that are not up to date, and those have to be brought up to date. There are research interests and things outside that, and there are things, if you like, in personal relationships which maybe aren't very demanding at one time, but do require a certain input, or you feel like making a certain input, and um.. those.. one has to maintain a balance between these things I think. But all those do take up time, sure, and the political events of the world don't have a direct bearing on them from day to day events. Just because of the nature of the general constraint we are in, but obviously with my contract coming to an end

in six months time, then I'm in a different ball game and I've got to change my thinking.

INTERVIEWER

So you are going to another job in actual fact?

LL

Well that's putting it too concretely I think. There are only vague things floating around at the moment but I can't say to what extent the general political situation will influence it, except that at one time it was a very easy matter to get a job, you only had to apply for one. Whereas nowadays you have to apply for two or three hundred in order to get one, and that does make a difference it makes it much harder, and much more boring and much more unpleasant and you tend to think to yourself well maybe if jobs are that hard to come by, maybe that isn't what I should be doing anyway. So in a way it widens your horizon, you tend to be more free thinking about it I think.

INTERVIEWER

Would you say that you are very well informed about news items.

L

No.

INTERVIEWER

You wouldn't say that you were very well informed at all?

L

I wouldn't have thought so no. I mean what tends to happen is, I perhaps a radio broadcast in the morning before I come out, in which there are various news headlines, but sometimes you hear it twice you know. I might hear it at eight o'clock and then again at nine and by the time the thing comes round at nine I won't say that the news is a surprise to me, but I don't remember what it was until the man says it again. And two or three hours later there may be only a few things that have stuck because I can.. because they are of some more direct interest to me I suppose. At this time of year for instance, one is a little bit conscious of what is going on in British politics because there seems to be a lot

there with the T.U.C. and the Labour party going in umpteen directions you know, that sort of thing, one does follow those events and I do remember that John MacEnroe won another tennis championship, the third successive one, so those sort of things do stick I suppose but broadly speaking, I think that nine tenths of the news you forget it and you would go insane if you didn't.

VIEWER

O.K. thanks very much then Nevill.

Interview with PeterVIEWER

Right then Peter how do you see the current situation in Poland?

I must start by saying that my following of that situation has been relatively spotty and until a few months ago I was under considerable hard work and was not watching the papers very regularly um.. so I have some background knowledge over the past ten years watching the development or the failure of development of workers movement, or a free trade union movement during the period 1970 - 1978 and only in the last couple of months have I been able to spend some time reading the papers on a regular basis to follow something of the development of the Solidarity conference and the confrontation between a free trade union and also um.. a free trade union and the Polish Communist party on the one hand and basically the free trade unions against the Soviet Union and the rest of the Warsaw pact countries on the other, um.. I feel .. if you asked how I viewed the current situation um.. I think it's extremely precarious I think solidarity is sitting very close to, as an extreme position as they can without provoking Soviet military retaliation, how far we can compare the present developments between the Soviet Union and Poland with those of the Soviet Union and Czechoslovakia in the spring of '68 is hard to tell. Obviously the Czech Communist party went too far and the Soviet Union felt decidedly threatened um now a similar form of threat is coming in the sense that if some kind of dual power system or some kind of basic change in the governmental structure of Poland comes about, then you're going to have pressures for those changes to come about in Hungary, maybe some revived pressure in Czechoslovakia although one doesn't know how successful that would be, given that the mobilisation has been going on for a full ten years um.. maybe some kind of levelling of the dissident movement in Russia itself so Solidarity has to be very careful to maintain continuing progress within its movement so that the people who support the movement will feel that they are getting somewhere, don't get disillusioned and go home, or get disillusioned and go berserk, at the same time one

has to realise that at some point the Russians may choose to come in, regardless of the cost, the very real cost that they would face in taking over Poland. Both with respect to the fighting that would go on in Poland and the deteriorating relations with the West that would obviously follow. There's a chap in our department who knows a fair amount about Poland and has Polish friends who tell him that the Polish armed forces would resist militarily if the Russians tried to take over the country by force, but they were only in possession of two days of ammunition because that's all the Russians trust them with so one really doesn't know what the nature of the military confrontation would be, if such a confrontation took place. I think they are a remarkably brave people I think to live on a knife edge like that and continue to live one's normal life but knowing that with every move you make you may push it over the brink and end up in civil war or military occupation I think takes a particular quality of courage which one doesn't meet every day. There's one thing I was thinking about in connection with the relationship between this confrontation and the confrontation in Prague and that is that at least it is not the Communist party that has changed its colours, that is a government that has changed its colours which was, I think probably a greater threat to the Russians, actually seeing something coming up through the Communist party that fundamentally changed the nature of Communism as the Czech saw it. This is a movement that sits outside government, there can be some kind of play between the government and the union which does not, at least indicate to the Russians that the whole governmental structure is disintegrated into a way that they probably felt under Dubcek that normal Communist Party control over the country had completely disintegrated. So it may give the free trade union more rope to play with - given that they cannot be accused of actually subverting and destroying the government although that is what the Russians will say sooner or later, it's what they are saying now. I think it's hard to tell how much these individual movements depend on national differences between say the Czechs and the Poles, it's also very ironic to think that the Poles were amongst the worst in reprimanding the Czechs in

the period immediately before the military takeover and the Poles were as hard line against any change in the Czech regime during the as any of the Warsaw Pact countries including the Russians, now it is the turn of the Czechs to be hard line against the Poles and it does seem to be a .very ironic thing to look at given

INTERVIEWER

Do you know any Polish people?

No I don't

INTERVIEWER

You don't, so you've got no sort of inside information at all

No I don't its only what I read in the newspapers and I read more newspapers than I watch television, I don't watch television news habitually and I hear radio news only sporadically so it is what I read in the newspapers that informs me, or gives me most of the information.

INTERVIEWER

Have you followed the history of Poland at all?

No I couldn't say that I had. I know um.. I mean I could give you a thumb nail sketch in twenty five or thirty year blocks but that's about all. That Poland got its independence from the Russians I believe after the first world war, that the Russians had in the late 1800s the 1860's particularly put down nationalist movements in Poland and put them down very bloodily , that the evolution of the government in Poland after the first world war moved toward a military, I don't know if it was military dictatorship but it was certainly the military in control of government in the 30's under Bidulski and then of course it was over run by Hitler on the west and the Russians on the east at the beginning of the second world war and there was a London based government, based on the pre war Bidulski government, as well as an indigenous Communist party, underground a partisan movement which was allied to the London government and a group of Polish communists who actually took refuge in Russia and formed a, what the American press would call a Russian puppet government and the Russian puppet government came back with the Russian troops at the end of the second world war and effectively

eliminated both the London based partisan movement and the indigenous Communist party movement and it stole itself over a three year period out of the second world war. That's about the lot.

ence on
vision

INTERVIEWER

Right to turn to something different have you any views about violence on television?

Um.. I don't think I could say I have made any special study of it or... again I'm not a great television watcher so, I watch an individual specific television programme and then I turn the television off. I mark up the Radio Times each week with those programmes which I am going to watch, the television is not left on in our house so that you would stumble across programmes that you don't intend to watch. So I do that not only for myself but because I want to use my time in other ways, but we have small children and I want them to get used to using the television as a resource to use in very specific ways and not just for baby minding or entertainment at any time of the day. So they are allowed to pick particular programmes and then they turn the television off afterwards so I don't see a lot of random violence on television, I can't help but feel that exposure to ... there are two kinds of violence aren't there? there's the violence that actually takes place, that news and documentary report for you so if for example, the heavy television coverage of the Vietnam war actually showed things on television which a lot of people, most people I would think, had never seen in their lives before um.. kinds of degrading treatment people being shot, people being burned with napalm all kinds of things that people wouldn't in their lives, normal people would never see and then there is the further side to violence that we have, macho, in terms of cowboy films and police films and detective stories and all that sort of thing. I can't help feeling that the second kind of violence - the made up violence has an insidious long term on people who watch a fair amount of it in the sense that I'm sure it must cause people to feel that they um.. that being violent is something that is reasonably acceptable that it doesn't really hurt other people anyway because they always get up at the end of the show, that it is something that

one can indulge in because you see so many other people indulging in it, it seems like a normal part of quite a lot of television programmes. I'm sure it just degrades the threshold, it lowers the threshold of which people will resort to violence if they come across a situation in their own lives in which they are provoked to it. The kind of violence that is actually recorded live for documentary I think if used selectively is important for people to see because they actually find out what the nature of political decisions that they are making what the consequences of those decisions actually are. I think it's important for people to know in America what was actually going on in Vietnam and not being filtered through media which is less direct such as radio or newspapers and journals. Because when people realised what was actually being committed in their names and the scale on which it was being committed, I think that helped a lot in the development of the anti war movement. So that people knew what they were protesting against and knew the degradation that both the troops that were being exposed to this kind of thing being told to go out and do this kind of thing and the people of Vietnam were being exposed to. There was degradation on both sides and I think it was important that the citizens of the United States knew that that was what was being done in their name. So I think it is important that in the same way that one sees things happening in Northern Ireland and in the cities in Britain in the summer which one should know about because that is the way either crowds are reacting or police are reacting and the people should know what the nature of those events are so that they can judge when political measures are taken to deal with them. Um.. there was something else I was thinking of - don't know whether it will come back or not. No I'll have to leave that - it will pop back into my mind later.

INTERVIEWER

O.K. would you see sport such as boxing and judo and fencing for example as fringe violence?

Well don't forget that judo is not done with violence, other parts of the martial arts may be but usually even aikido or kung fu or any of those are not actually physically violent there is not, unless there is an accident, an injury given or received so there are certain forms of martial arts that are performed in

which you have a form of combat, yet that combat does not result in physical injury to the people involved. Boxing, boxing is a form of fringe violence and the fact that it is ritualised doesn't probably help all that much I think as we become more aware of the fact that boxing actually physically breaks up the people who do it, that repeated concussion and just repeated blows to the head, does break down boxers ability to think, it just destroys their brain cells slowly, something that I don't know that people would have taken seriously thirty or forty years ago - everybody has heard of people being punch drunk, but that was a minority happening that was probably dismissed as somebody having had a rather bad accident as opposed to boxing in the normal way, and most of the famous boxers that one thinks of - like Joe Louis, and Rocky Marciano, they lived to be businessmen and successful people later on so one could point to them and say "well look at all that they took and yet they came through it all right, they made a lot of money they gave people a lot of pleasure" and so on, but I do really think that in the end that is a form of violence. Wrestling is, I mean that's a charade, either you have olympic wrestling in which you have formalised rules, people do not get hurt unless there is an accident, it's done according to rules that by and large don't inflict injury or you have the professional wrestling um.. supposedly professional wrestling and what that turns out to be is a charade with people shrieking, I mean it's a morality play on the lowest level, but football no. I would not consider things like football and um I mean if you wanted to find the closest case between those two, I would suggest American football or North American hockey are cases where um I've never seen roller derbys so, I believe that is probably even worse but the sports that I was exposed to when I was a kid which would be as close to ritualised violence as you would think, that would be hockey and American football,

INTERVIEWER

What was the other one you suggested?

Roller derby, that's basically skating around a rink in team but I believe there's a heck of a lot of team practice of eliminating the other team as you are going around, and I believe that it can get quite violent, I think you can body check and when you

body check at those speeds like you do in hockey it can be quite violent, even then the number of people who really get hurt at it, if you consider one of the objects of violence is to actually inflict physical injury on somebody um.. and if it's a spectator sport then the object is to go and see people being hurt um.. then even in hockey or professional football it's the odd person who gets hurt rather than that being the normal rule or the object of the exercise but there is a lot of violence in it particularly the way the game is played in North America, I mean hockey in this country or hockey under olympic rules is a very sanitised version of what is played at home in which the stick and the body can be used to eliminate people to get them out of the way so that you can get to the puck and people are crushed against the boards and people are knocked to the ice, at speed I mean around thirty miles an hour and they're really going um.. so there I would not have said that the effect of that is to degrade the people watching it, I would not have felt that. I would say that the things that people took away from those sports were much more what you see in good football here, um.. which is the very skilful and spontaneous interplay between three or four people creating a form of pattern and play and stretching themselves to physical limits of ability not just duress but of ability which you would never be able to see normal people do, and that is what people take away by and large. Not boy did he get it, did he get crunched! but did you see what so and so did when he caught the pass or when he went down alone and scored a goal or some equivalent aspect in football. But I wouldn't feel, no I would not feel by and large that those contribute to a level of violence or an appreciation of violence. why if you then want along to ask me "why is it that you get the kind of hooliganism that you get at soccer or football matches" here amongst the crowd, then I don't know I really don't know why it centres around football.

Maybe group hysteria or something like that.

It might be, but you would expect that kind of hysteria to appear in many groups of people, I mean you would expect it to appear at pop concerts and by and large it doesn't, you don't

INTERVIEWER

get that kind of violence at rock concerts but you do get it in football and it's been here a long time and it doesn't seem to be going away.

INTERVIEWER

Would you say that these various forms of violence aid violence in the home?

Um.. I don't know that's very hard to say because I've had very little exposure to overt violence in the home, either in the home that I grew up in, homes I've lived in or the home I live in now. It's.. I would not if you ask me to speculate, just to speculate because of this lack of exposure that I have. I would have said no, I would have said that the places where you see violence on television by and large are not connected with home situations, they are connected with people doing their jobs people outside the home, people in social encounters, at clubs or on the street, or in football stadiums - that you would see them in places which by and large are not the home. The number of dramas that you would see on television in which you see a husband kicking his wife around the kitchen or either a husband or a wife clouting the kids about is relatively small. I would say that it would be peanuts compared to the violence you see in terms of westerns or detective stories. I would say that the violence in the home is much more a question of social measure and having it being passed down from generation to generation that it is accepted that husbands are violent to wives or that husbands and wives are violent to children um.. it's a social pattern which I don't think, I think it very very largely pre-dates television. Um.. I would guess that it has not been significantly increased by television watching. Most of the studies that I have read anything about, I haven't actually read a detailed study on wife battering or violence to children, but if you see the snippets in the newspaper, what you see most often is a pattern going from one generation to the next, that if fellows are violent to their wife or their children then the next generation turns around and uses the same sort of violence in turn. that they have internalised it early as an acceptable social

measure and therefore they practice it. There has been some evidence which I would take with, I would take an extremely careful look at if I were to get involved with a study of that kind. In terms of wives who are battered comes from homes where their mothers were battered and therefore there is some, either expectation or acceptance of early developments in that area, either they gravitate to violent men, or they accept violence when it first comes rather than reacting strongly to it, but I wouldn't trust any information that I particularly had on that. But it does seem to be a creation I must also say that I found it, Maybe I was too naive when I was at home, I came to England when I was twenty one and I've lived here ever since.

INTERVIEWER

You've lived for some time actually.

So my whole experience as an early teenager has been as a Canadian and most of my adult, material adult experiences are in the British view. I was amazed when I first came to hear the commonness of violence in the home and violence among couples who were not yet married. The number of times I would hear people I knew as a post graduate actually being violent to their girl friends, and their girl friends accepting it, considering that as a profession of concern, although a too enthusiastic concern. I had never heard of it in my teen age and being in Canada, went out as couples much earlier than I suppose, as far as I could see um.. my contemporaries in university did. Now I worked with physics post graduates and that provoked me um.. set out a certain social sub set which is probably not common at all or representative, but I had never heard of a bloke hitting his girl friend at home and yet I heard it repeatedly when I came to this country. Whether Britain has a larger and more persistent pattern of violence in the home than is the case in Canada I don't know, but I certainly got exposed to it here. I never heard of it.

Third World

INTERVIEWER

Thanks very much Peter, Right to change the subject, have you any ideas on the development of the third world physically and economically?

UL

Um.. well let me start by saying that my brother-in-law is responsible for Canadian foreign aid projects in Kenya and that we went to see him and we saw him and my sister and their family for three weeks at Christmas time and in that time I went out to visit a number of foreign aid projects in Kenya with him. um.. we went on tours of inspection which he does regularly to those projects which Canada has invested money in. Or to see projects which money has been solicited from the Canadian government. So I have had some exposure to attempts by European and North American governments to promote development of the third worlds, economic development that is in the third world, and I would say the experience that I have had leads me to be suspicious of any global solutions or any too optimistic solutions for problems of economic development in the third world. Kenya is supposed to be one of the more successful of the countries, it has a relatively stable government ever since it gained independence nineteen years ago. It has not been involved until relatively recently in any form of military confrontation or a violent confrontation with its neighbours and when Kenyatta died a couple of years ago it was felt that there would be a bloodbath because of Kenyatta's family which had so strongly entrenched itself in government. took over, was not a Kok that is a member of the dominant tribe, he was able to take over as an interim president and then become the elected president afterwards so that a test of a considerable amount of political stability and to governmental organisations in the country. It is considered certainly, to be one of the more right wing governments in Africa and does not take a very particularly strong ideological line in matters of African affairs. But with such a country which is obviously open to western development and western finance and has much, a much better governmental structure and an inter structure of what you call or functionaries or bureacrats that can try to organise and run it, a developmental system than you would find in many other African countries. Still the problems of actually getting money to the right places and having it do the kinds of $\frac{1}{2}$ things that you would hope to have done and even further to have

that effect last over a period of greater than two or three years, is monumental. So you will invest in what you think is absolutely a cast iron, first rate project and everything will go swimmingly for the development and the duration of the project when you are actually creating it and then you will find that four or five years later it is maintenance contracts that have been allowed to slide, and the material you have put in by and large is degrading, nothing works the way it used to work. Simply because the long term inter structure is not there and it won't be there for a long time to come as far as one can tell. You also see examples where the desires of the donors are such that they disturb the pattern of development because unless they see it developing in a certain way they cannot convince the people who give them the money that real aid has been transmitted to the accepting country. You will see a lot of money wasted because it is the donor's desire that it be wasted in that way. I saw projects in which twenty per cent of the development costs were a waste, and when you're talking about half a million pounds, you're throwing away an awful lot of money, simply because the donor would not accept, say that wood was as good as steel, and therefore the roof beams in the building had to be steel and that means importation from Germany and so on. So at the level of economic development and considering Africa and certain places in Africa as the one place where I have any personal experience at all, I would say that I'm not sanguine, I know the job has to be done, I know you have to have, I think by the way, that the British government's policy in the last couple of years has been disgraceful in cutting down on the miserable foreign aid that we were already giving - and to actually cut it down further is just one of any number of iniquities of the Thatcher government. But I know how difficult it is to actually get money into the right places and do the kinds of jobs that will last and make a permanent contribution as opposed to being a drop in the bucket or something that is spectacular for three years and disintegrates. If you ask me if I had a unified concept of the third world, I would say no, and I don't think such a unified concept has much meaning, they are already talking about the fourth world, in the sense that the fifty poorest countries in the world are in a different class of poverty from countries like Kenya who would normally be classed in the third world. I am sure that problems of development both

political and economic are so localised in terms of the history and geography and climate of an individual country that to try and mount any global solution for the third world will not ... I mean there may be some help but I was going to say they won't do much harm, they won't do much good either. They certainly won't be specific enough to eliminate the kinds of problems that I saw when I was actually looking at development in Kenya. That is not to say that there should not be a continuation, an actual promotion of the kinds of re-distribution that was attempted on paper recently at the Norway conference. That the re-distribution of wealth and resources between north and south and a re-equilibration of development of industrial capacity between the third world and Europe and north America, we could throw Russia in there too, isn't absolutely necessary it's perfectly clear that certain kinds of production should be centred in the third world and that they should actually be selling us industrialised goods. While we sell them other goods that they are at present not capable of developing. To keep them as primary producers and to manipulate the international markets in primary produce to make sure that they are as low for them and therefore, the profit margins are as high for as as possible - I'm sure is long term a devastating policy to pursue. To try to get people to renounce their self interest is terrible. But it's certainly one that is going to press us more and more, it's not going to go away.

Energy

VIEWER

No I'm sure. um.. right I don't know if you read a couple of weeks or so ago a fellow crossed the channel using a balloon and solar energy - do you see ballooning as a form of transport in the future?

Not really - I would doubt it. I would say they are just too cumbersome, I would say certainly certain types of boat transport like the reactivation of the canal system would make much more sense than trying to look for balloons. Balloons get driven off course, they're ... if you don't use hot air balloons which are wasteful of petro chemical that we just can't afford

to throw away that way, there will be much more efficient ways of using them I'm sure than of heating up air balloons, if you depend on sort of fixed balloon, then you've got to go to either helium or hydrogen and both are... well hydrogen certainly isn't but helium is a scarce resource and is one that you can't throw away by the million cubic yard. I would not really... um ballooning as an amateur sport I think is great, I've never done it but it certainly looks lovely. But as a serious proposition, I don't think that they are on. It may well be that people come back and re-design them in such a way that they do prove profitable, but I just can't conceive that they would do anything that better forms of naval transport wouldn't do. They have got to be slow, they're not going to be fast so if you want to transport things slowly then you might as well put them on boats. I don't know the economics of running the engines of a zeppelin versus the engines of a boat, but I couldn't imagine for one moment that the zeppelins would win, it may win but if you ask me I would say no.

VIEWER

Well why I am asking you is that solar energy is being used in solar heating projects for example.

Oh solar energy is a different thing, if you ask me about balloons, well that's one thing, if you ask me about solar energy, yes I would certainly say yes most definitely there is a future for solar energy, there's no question - what precisely the mechanism is going to be whether it is going to be some kind of biological mechanisms where the sun causes things to grow which we then ferment and get the methane out of and use that, whether it's going to be direct - I mean that was twenty or thirty years ago - the belief that you were going to get photo electric cells and you were going to get better and better ones and therefore, people would line their roofs with photo electric cells. I think the history has not proved terribly satisfactory, I don't think they've got the price of the solar cell down to where it competes with any other form of energy yet, I don't know if there is a breakthrough on the horizon the little I've read about it would

not indicate that there was but there are a lot of other ways including one we have at the O.U. My colleague in the physics department is building a very simple form of long term store of solar energy which is simply .. he has rocks, he has a pit with rocks in it those rocks have um.. it's small it's small scale gravels then he has piping running through the rocks and the piping comes up to the top where you have a collector tray, where you have a series of these pipes running back and forth in some kind of matrix that transfers the solar heat to the fluid inside the pipes and then they circulate it down to the rocks underneath. I think he has some form of switch that will lower a cover over the top when the sun is not there or when it's not sufficiently light because I don't think he needs direct sunlight I think he can have it off the clouds if the clouds are thin enough. So he stores when there is energy to be stored, or he I should say he collects energy when there is some to collect, he stores when there isn't energy to collect and they're hoping to prove that this is a viable system for house heating, and I think if you get a big enough collector and run more than one house off it, it probably will be.

VIEWER

A viable proposition.

I think it would be a viable proposition because most of the area is underground, the store is underground and since houses in this country don't have cellars by and large, old houses have them not the things they're building now don't have cellars so you could put this underneath the cellars or in a common area and have it going to twenty or thirty houses and that looks like it could be a viable proposition that is right in the middle of research now. Another area that I have a friend who has been doing some theoretical studies on as opposed to a practical study is a solar pond, you find a pond of water and you put upon it, either a chemical - a liquid chemical or some kind of plastic you actually cover the pond with a transparent medium of either plastic or liquid chemical which then acts as an insulator and

with the sun um.. will heat up the pond and the insulating medium will preserve the heat when the sun is not there and then you will extract that heat for use in a number of low temperature situations and a friend of mine designed a system of solar ponds to provide all the thermal needs of a city of fifty thousand people so there are any number of methods being investigated for the use of solar energy and of course I have no detailed knowledge to know which one is going to work out or which mix of things because I'm sure it's going to be a mix. However, I am convinced that that is going to be something in the next fifty years, I mean the number of for example the Canadian government has now decreed that all it's diplomatic houses in third world countries such as Kenya will have solar collectors on the roof to provide the hot water needed for the houses so that they won't be a drain on the local electricity supply. Now of course, there's a certain amount of fanfare about it and a certain amount of publicity but it must be a reasonably viable proposition for people to try doing it on that scale. I know if you go to Israel you will see solar collectors on the roofs all the time for heating hot water and I do believe that you know in a number of different ways solar energy will become more and more important to us.

VIEWER

Thanks Peter, I'll just turn over the tape at that point.

r Strikers

VIEWER

Right Peter, I expect you know that there are prisoners on hunger strike in the Maze prison in Belfast do you see these people as terrorists and do you think they should be given political status?

For me the problem is - I will not confront the problem at that local level in the sense that I do not believe in the long term viability of a British presence in Northern Ireland I do believe that the opportunity was missed in 1921 or 1922 when the six counties were created I do think that all of Ireland should have been given its independence then and I believe that the only long term solution for the British government is to announce a

period during which negotiations must take place because at the end of that period military presence is going to be withdrawn and if that requires that a certain number of hundreds of thousands be re-located because they can't bear to live in a united Ireland then so be it. We have accepted other influxes in the past ten, fifteen years, I'm thinking of the Kenyan Asians and the Ugandan Asians and it was perfectly right that they should have been accepted in fact the way the Kenyan Asians were treated was abominable, at least the conservative government under Heath had the decency to say that the Ugandan Asians could come and they did come in considerable numbers now it'll be a much bigger influx I guess if Ulstermen feel they have to come to mainland Britain but it is in that framework that I see the whole problem and therefore, I don't believe that the people who are on hunger strike in the Maize are equivalent to your average armed robber, or your average criminal who simply operates for his own individual gain, I do think there is a distinction, I know the British government doesn't feel that it wants to make that distinction because it feels it would elevate them to a position or a status that it does not consider within the context of any solution that it envisages for Northern Ireland. I think that is a mistake, I do think these people are fighting for a certain political vision regardless of whether we accept that vision or not if you go back to 1948 the British government was doing exactly the same thing with the Communist insurgency in Malaya they called the people bandits they did the same thing in Rhodesia, they were doing the same thing in Kenya during mau-mau both people were bandits what are they now, a legitimate national government. Begin was a terrorist and now he is a President or Prime Minister of Israel and so before you give them independence they are terrorists and after you give them independence they are the leaders of the national liberation movement. Well if it works out that Northern Ireland becomes part of a united Ireland then the same thing will happen with these people, although they won't come to the top of the political heap

in anything like the speed because there already is a government in Dublin which they would have to somehow intergrate or come to terms with. I think the whole treatment of I.R.A. suspects in Northern Ireland since particularly since the introduction of internment and since the prevention of terrorism acts has degraded the quality of British justice in Northern Ireland to such a degree that they do not have a moral position in which to stand and say that the people on the other side are not motivated by political convictions and are not actually fighting what is in effect a civil war. If one could believe in the quality of criminal justice in Northern Ireland, one might have some reason for saying these people should be subject to that justice like anybody else is subject to that justice, to that rule of law in Northern Ireland, the rule of law in Northern Ireland is so badly degraded in my view that the use of the military has become so dominant in Northern Ireland that one must acknowledge what is on the other side of the dispute is much more like an army than a bunch of thugs. Mind you that is not to condone the kind of things they do. Any of the national liberation movements that you can think of have indulged in the kinds of violence which nobody, other than people I guess who are that committed to some political end would consider acceptable price to pay. I think that is where I stand on that.

VIEWER

Do you think the M.P. for County Tyrone Tom Carrol should be granted an interview with Mrs Thatcher?

Yes no question, I realise that it would be a political embarrassment but that's too bad. He probably wouldn't say much more than she already knows but there is no reason why he shouldn't be granted an interview just because he's that particular M.P. as opposed to some other M.P.

ies

VIEWER

O.K. right. Have you any hobbies at all or things that sort of turn you on, things that you do outside of the O.U. Can you say how you got interested in these?

Well, one of my hobbies is playing guitar.

VIEWER

Yes I can see that by the length of your fingernails on one hand, they're short on the left and long on the right. I just figured that actually because I'm learning to play the guitar myself.

Yes well I've played guitar since I was eleven and played all kinds of different styles at different times.

INTERVIEWER

Such as?

Well let's see, I started out playing country and western when I was eleven to thirteen or fourteen and then I got into a jazz band and I played jazz guitar for a while and that was all playing with a plectrum that was not playing with the fingernails. I got interested in folk music along about the time of Pete Seger and the Weavers, The Kingston Trio; Peter, Paul and Mary and a whole bunch of other pseudo folk groups were making a lot of money in the states and Canada.

INTERVIEWER

I think that was at the end of the 60's beginning of the 70's wasn't it?

That would be the early 60's coming through the middle 60's. I came here in '63 and although the groups were popular and some were over the hill, the Kingston trio was over the hill by 1963, so it would be late 50's and early 60's. The Weavers of course were much earlier they were a group that existed for ten or fifteen years and I wouldn't call them a pseudo folk group but I would call the Kingston Trio and Peter, Paul and Mary a pseudo folk group. But I got interested in folk music through listening to the kinds of songs that they played and then I came over here and got interested in British folk music and also I had a long term interest in American blues music but until I started playing with my fingers I couldn't play very much of it that developed over here as well, rather than at home because when I came here I gave up playing with a plectrum and I started playing with my fingers. It always had seemed absolutely unfeasible for me to keep a set of fingernails for any length of time, therefore the problem of always having a broken nail and not being able to play was something that I mastered over a period of years because I basically converted myself to using my left hand for all kinds of different tasks that you would use

your right hand for, to keep myself from breaking my fingernails like dialing a telephone or pushing a doorbell. So my style of playing changed as I learned to use my right hand and play with my three fingers and thumb and exposure to folk music and British folk music in folk clubs was something of a revelation to me. Because I'd heard almost nothing about it at home. I'd heard Appalachian Mountain music which is I know now as derivative I found it very sparse and somewhat harsh when I first heard it, coming to Britain and listening to English folk singers I found the nasal quality of their voices something I quite liked as opposed to something I didn't like and when on the few occasions when I have heard some famous exponents of Appalachian Mountains music like Jean Ritchie sings, she now sings like anybody around here sings when they get up and sing in a folk club. Whereas at home I thought she sang in a very strange fashion. So ;I've gravitated to English folk music and American Blues and.. but all through the period of the middle to the late 60's to the early 70's I was also singing and playing an awful lot of music that was off of the radio at that time because there are a number of singer songwriters such as Bob Dylan, James Taylor and Leonard Cohen who were writing songs that I especially appreciated it was a time when the quality of the lyrics became much much more professional and artistic at the same time than had been the case in popular music in the 50's and early 60's which was mostly junk. I mean I liked that music a lot but one must say that the lyrics were mostly junk and the lyrics became involved, much more expressive of people's concern in the 60's and early 70's of course a lot of it has dropped back now, there are very few people of that quality writing any more. So I was singing a lot of their music which I still do sing although it's now history as opposed to the sort of music that's on the radio at the moment and have kept an abiding interest in British folk music ever since that period and in the last four or five years have had a couple of occasions in which I could write some music because there have been a couple of theatre productions in the local area here that have needed music of a traditional English style and I have been asked to write some music for that

and I have done so and enjoyed doing that. So it's been a long and abiding interest playinhg and singing, I now of course play and sing a lot for my children.

INTERVIEWER

Yes that's delightful.

Oh it's wonderful I mean most both times are times to sing and play as well as get washed and the kids are learning to sing very well too.

INTERVIEWER

Your wife sings as well, does she?

Not as much as I do no she, I don't think it is unfair to her to say that I'm a better singer than she is, she can follow a tune if someone else is singing it, she has a hard time hanging on to a tune, but she sings a lot with the kids when I'm not there because she doesn't feel embarrassed and the kids like it. They don't mind if she wanders off key a little bit so there is a lot of singing either I'm doing it or my wife's doing it, or the kids are doing it or, all of us are doing it, at the same time in the house just as a normal habit, just part of what we do all day, um.. and the kids are also listening to tapes of either children's songs or folk songs that have been recorded with children in mind which we have, we have a dozen tapes and they.. there are times in the day when they turn them on and listen to them, but they're coming along both as listeners and singers. But that's... that and the study of literature, reading both poetry and prose which is again an equally long term interest, I became very much interested in my early college years because unlike the British university curriculum in which if you go to read physics you start on your first year with physics and you end up the third year with physics and that's it in North America I wnet to read engineering and in the first year engineering class you had to take the normal English class that everybody took no matter whether they were majoring in English or whether they were majoring as I was in engineering. So I had a year of extremely good teaching in the study of English literature, it was a survey course but we had good people whose major concern was teaching English at the

university level and doing research in English literature were teaching us as well as teaching the English majors. so with one very good exposure I got shall I say turned on I'd had abominable teaching at secondary school, my secondary school teaching in English was just... I look back on it just with deep horror. There was no one who understood anything about English literature at my secondary school and we all had to take it, I mean again it was like the scholar system here in the scholar system you have to take lowers and highers and in lowers you take ten subjects and in highers you take five or six and there is the same thing in Canada when I went through I took eleven subjects at lower level and I went straight to university from lower level which you could go on and take an upper level and you would take six or seven subjects in which English would have to be one.

INTERVIEWER

Yes a compulsory subject?

r

Yes that would have been a compulsory subject so I had to take it as everybody did, but it was absolutely abominable teaching so that this one course at first year university level was really a life saver for me and it introduced me to modern poetry and to Shakespeare and Milton and Chaucer and authors that I have enjoyed tremendously since.

INTERVIEWER

You were introduced to these at school presumably?

r

Dickens, Shakespeare and a bunch of junk novelists is all we had at secondary level, we didn't really have a course anything like the survey course that I got in university, we had to do a Dickens novel and we had to do a Shakespeare play every year for the last three years at my secondary school, so I did by the time I'd finished secondary school, I liked Shakespeare I didn't like Dickens and I had no other exposure to anything that was really .. I mean our poetry was John Masefield and I consider him dull

INTERVIEWER

You didn't get Robert Browning or someone like that?

r

No we didn't even get up to Robert Browning, it was very bad it was a terrible curriculum but since university I have read

continuously. My wife in 1972 - 1975, went back and did a second first degree here in England after I joined the O.U. She went back to the University College, London and did an honours English degree and so we were both involved very heavily in that, and I read a lot of the stuff that she read and discussed her essays with her, I attended the odd lecture and when something special came up, and that has been a long term interest. Over that period we saw an awful lot of Shakespeare plays, since we had children we have had um.. less, fewer number of outings. I hope that will change again. I hope we get back to seeing say, habitually seeing everything that is on at Stratford this year.

INTERVIEWER

It's not too far away?

or

It's not too far away, it's a lovely drive over there, it's a very nice outing when we do it. But I would like to, and this is something that I used to be able to do, again as something that I do away from work which is to see everything in Stratford each year. To be able to keep up with it and enjoy it and see how it is evolving. There was a particular period in the early seventies when they were actors like Brewster Mason and Ian Richardson over at Oxford and I look back on those... I look back on their Richard II with nostalgia, they were some of the greatest performances I have ever seen in my life, I'm sure.

INTERVIEWER

Have you any other pastimes or things that you enjoy doing? right away from the O.U. and your work..

I wouldn't class my children as a pastime, but that...

INTERVIEWER

Activity is something that you enjoy doing, I suppose you can't really class it as a hobby either - something which is part of you and not part of our... well I mean your work is you, but I mean...

Getting right away from work I have almost continuous involvement with my children, this is the other thing that takes most of my time. If you ask me how I spend my time? I spend my time doing O.U. work and reading as much as I can, playing as much music as I can - and those second and third things are woven around my children because they are two and four and they're at a time when

a lot of help; and also I enjoy very much being with them, so; they consume a lot of time.

Yes I can imagine so. Right have you any advice for someone getting married?

Don't do it too early - umm live with the person you're going to marry first for a couple of years to see how it works out, don't expect it to be the same thing for the rest of your life, as it is when you first get married because, I would say one of the things that has received relatively little attention until recently is the different patterns of growth for your average man or your average woman through say the first twenty years of a long term marriage. There is a particular book about this called "Passages" which documents and talks about people

It's called passages, who is this by?

Goodness, I don't know.

Is it a recent publication?

It's about five or six years old and what it talks about is different patterns of growth, if you look at a couple in the North American media particularly, they get married at 21 the man is out of college, they have kids within a couple of years, the wife is heavily involved with child rearing, while the man is involved in hacking out his career - they will get to the age of thirty five, the kids will be fourteen or fifteen. The man is at a stage where he will either be accepted into upper management or he won't and he is carving his position there. It's one of the more intense times of his career life because he is either going to make it into an upper stream, management or he is going to be stuck in parking orbit and the life comes to a period when the lives that they have assigned to themselves in their twenties have now basically finished for her they haven't finished for him at all. The same role that he assigned himself at twenty one he is still working on in his middle thirties. She has been a mother and motherhood now is much less absorbing and much less complete a task that it was in her twenties

so she is looking around for new interests, she is looking for a new identity and he is not. He is probably burying himself in his job, he is probably exhausted most of the time in sexual terms he is, according to this book, starting to go over, well he is well over the peak. The peak of sexual performance for men is somewhere between eighteen and twenty five. The peak for women according to this book is somewhere in their thirties - late thirties, so she is coming up to her sexual maximum, he is over the hump. He is exhausted all the time, she is not and there is a miss-match, there is a fundamental mis-match, she is going out to new things or desperately looking for new things and he is still carrying on in a mould that will not change until his late forties when either he has made it or he has not made it and he must then decide what he is going to do for the rest of his life because he is either in upper management or he is at some level where he is not going to progress much more.

VIEWER

He's got twenty more years or so to go yet before he reaches retirement.

Yes, but they may be years which are not studied with new challenges and then he has to go out and decide whether he is going to look laterally for other things that will interest him and occupy him. Now that is an example of a mis-match which comes later in their marriage. So other mis-matches come much earlier of course, people don't wait twenty years to get divorced by and large if they are going to. So that if you are asking me to give advice, on of those pieces of advice, not to run off and read this book necessarily but to realise that most of our literature, most of what we see on television, most of what we see in films, until relatively recently has discussed an awful lot of people's development until they get married and there is a quiet silence afterwards in which these books just say get on with being married and that seems to be just more of the same and day to day and nothing much changes and I would say that's simply a false image and patterns change, the patterns of relationship between the parents. Once you have children again the patterns of relationship between the parents, because of the involvement with the children, change considerably and there will be a

continual threat of mis-match even though people look to be perfectly matched at marriage, there will be a threat of mis-match evolving over a period of time and that they will have to be on their guard for that and try to actually work those things through before they become the stumbling blocks that break down communications. I don't think enough people know, or are consciously aware of the sort of the insidious nature of the destruction that those mis-matches of patterns later on in life and can wreak on a marriage that looked very good in its first four or five years.

DRVIEWER

Would you advise a married couple to have children in the first year of marriage?

I

No I wouldn't - children are a ^{great} ~~great~~ experience.. well let me go back to one further - I would never advise anybody else to have children because I don't know how I ever came to make the decision myself. I cannot give a set of reasons why I decided that for me, if my wife was willing, we would have children. Most of the other major decisions in my life I have at least had some reason, it may have been misconstrued, it may have been wrong in the end it may have not worked out like that. But at least at the time I made the decision I could tell you a reason why I was making the decision that way. If you ask me why I had children I could tell you that it was a pure act of faith that I had somehow it had to be that way and not the other way, but I had no way of knowing why it was I believed that. I'm not a religious man I have absolutely no religious faith at all. But if ever I have made a move which was concomitant with an act of faith then that is it. So in that situation I would never advise anyone else to have children because it is such a personal decision for individuals. But if someone came to me and said "We are going to have children, we want children, we know why we want children, do you advise we have them now immediately after getting married or not" then by and large I would say no I would say have a few years of married life unencumbered by children and that's not that's just simply to say

that children consume a lot of your time and your energy and they prevent you doing a lot of things which young married couples would enjoy doing. Just having their freedom to be themselves around the house at any time of the day they feel like, having the freedom to pick up and go places to travel, to go off to the cinema to do whatever they choose to do together for some period of time, but once one has children for us anyway it has been the case, given that we live here and we don't have an extended family, so we are basically on our own in taking care of our children every day. Now people with a live-in grandmother or something may be there isn't that kind of stress. But for us, it's us two taking care of our children and being with them all the time and therefore that is certainly going to restrict them in the way that I mentioned earlier about going to Stratford. That is just one example of many about the kind of things that we aren't free to do now that we would have done before. That's not to say that having children was not worthwhile it's just to say that it is different and there are other things about early married life that I would say are to be enjoyed and if you have children you will forgo them until you are twenty years older and then you won't be the same people anyway.

VIEWER

You would still advocate people getting married as opposed to living together all the time? Marriage as an institution as such.

My feeling is entirely that the place where marriage has meant something to me over and above the decision to live together was the decision in having children. Now we didn't do it that way, we lived together for a while and then we got married and we were married for five years before having children. But that had more to do with getting a mortgage and there are certain institutions that pressurise people to be married as opposed to living together. For me there is one decision which is to live together and there is another decision which is to have children, and when you have children you are

then must have a legal framework within which to have those children which I think marriage provides. I do um.. for me it made no significant difference to be married as opposed to having chosen to live with the person I lived with. I did not feel the necessity to go through any kind of formal ceremony in the sight of any other people to change my status from being a single person to being a married person simply because I had chosen to live with one woman.

INTERVIEWER

Putting a seal on the relationship or something like this, a blessing or whatever you want to call it.

er

No that didn't mean anything to me and it had not meant anything in anticipation. I had never believed that when I was... from the time when I was seventeen or eighteen that it would um.. and in the event it didn't either. We enjoyed ourselves getting married, we had a good day and had a very nice day with friends. it wasn't qualitatively different before and after. So for me that is, you know, it's a continual and there are two points in the continual - living together and having children. Having children involves getting married because you want to protect those children. Those children must have the status which contains the two of you. In the legal framework in which we work - if I die, the goods have got to go to my wife and children, they have to be taken care of. There have got to be legal responsibilities for children who are incapable of taking care of themselves, that means that we must be a couple, to acknowledge our responsibilities to those children and that's... that, for me is the formal stamp of approval for marriage is all about.

sort of things does
job entail

INTERVIEWER

Right now changing the subject could you outline what you personally think your job entails at the Open University?

er

Well it's just in a period of flux but what it has entailed for the last ten years until very recently has been almost continuous course production so that my job has been to take a number of areas of science or history or most recently history and philosophy of science. I've worked in the arts faculty as well as working in the science faculty and I also

worked in the last faculty too. But to take a given area of a subject to learn it or to refresh my memory in it and then when I felt that I knew it according to the accepted canons to find a teaching strategy and teach that to our students, given that our students will never have the infra-structure of previous courses and previous learning. That most under graduates would have when they confront most of the material that I have taught. I have taught I think a typical selection of material in the Open University, I have taught three of the commanding heights of twentieth century physics and the general theory of relativity with the formal mathematical structure of quantum mechanics and a quite formalised development of thermodynamics which is a nineteenth century subject but in the way in which we try to teach it, it had some elements which were really much more reminiscent of twentieth century physics than of nineteenth century physics. In those three areas I was dealing with quite complicated pieces of subject matter so that my problem was always that I had to learn a subject myself and make sure that I understood it properly but to confront the fact that our students would never have the background that a student usually has when he comes to confront this material in a normal university. So it was a process of sifting out that which could reasonably be put on one side particularly in the areas of technical development, mathematical development, but still preserving some kind of skeleton of the main theory that I was dealing with, it would not be a travesty of that theory. And that searching for those two new strategies, looking for the correct mix of media either television, radio, cassette, print summer school - finding the right mix for each of those three topics and then the fourth major topic that I have dealt with for the arts faculty was the inter relationship between philosophic beliefs and physical theory in the work of Albert Einstein and again dealing even more with this problem of students who were formally unprepared for the material that I wanted them to know something about in that you would expect half the students to be art students who were not even had done

Our science foundation course and yet trying to talk about special and general relativity and its philosophic impact, people like that. So again it was even more, probably even more difficult as a reaching programme to try to get those people to appreciate the points that I was trying to make. That has been my major task. I have not been involved with administration, my only piece of major administration has been to be the Head of the physics for a period of three months when my head of department was on study leave, I did that a year ago and as I said at the beginning of this answer I am just about in a period of flux because in another year's time I will take over as Head of the physics department for a three year period so it will be a much more concentrated and much more long term dose of administration and personal management than I have had before, and I will have responsibilities for looking at the whole profile of courses that we make as opposed to just worrying about my although I should say that during my time at the O.U. we have always worried about the whole profile and argued about it and tried to design or re-design it from time to time. But it will be much more my responsibility to guide and shape those discussions now as opposed to just getting my oar in and saying what I think about them. Also I will be responsible for watching the emergent research programme and trying to assist in that emergence of that programme as it continues to develop in the physics department and I get involved with university administration well than will be wider in a sense as well. I haven't had any experience of wider university administration so far, that is simply because I am very heavily involved in course writing and my own personal research has badly suffered in that context and I am right at the moment taking a period of study leave to go back and look for areas to re-commence that research now that we are a little further along in the production of the profile. It has been very very concentrated course work and interaction with other course writers. Another thing I did, I worked for the first year of the development of the mathematics foundation course in 101, I worked with the 101 course team, I was on that course team so we met one day a week trying to

plot preliminary development of that course so that there could be some proper interaction between science and mathematics and there was in the sense that at the end of that period we could take half of the course basically and turn it into an S283 which is the elementary mathematics of scientists and technologists and that was because of development of 101 was such and the discussions were such that they could appreciate the things we needed so that the way the course structure came out there was most of one half credit that could be just taken out and used for this miniature foundation course for the next two or three years.

rent Affairs

INTERVIEWER

Paul can you say with respect to the topics that we talked about in the news, how interested you are in these topics?

er

Oh I follow the news a lot I mean I read a newspaper a day it may bunch up and I have to read three on Friday night but I do try to read a newspaper every day, I also subscribe to a French newspaper, I get the weekly edition of Le Monde which is a selection of their newspaper articles, much like the Guardian weekly but the French version of the Guardian Weekly because I think Le Monde is probable one of the best newspapers in the world, certainly the best and most complete in its international coverage of any newspaper that I have ever read, and I have read Canadian papers and I've read the New York Times, The Washington Post and the Christian Science Monitor and of course most of the British newspapers at one time or another. So I get that each week and I make a determined effort to read it every week, I don't always finish it but I read a number of journals in the library we get

and we get a number of others like Dissent and Diadulus and other journals of political commentary such as the Political quarterly which I read from time to time in the library when I get a chance, I usually skim them to make to look for articles, and the new left review. So I am interested in political topics and I do try to keep myself informed, I ...

That is something that I have only developed really since I came to Britain, I was interested in political topics but I did not read much when I lived at home and what I did read I now realise was shaped in a way that I don't think anybody could appreciate until they go away from their own country and look back at their own country through the eyes of somebody else's newspapers or television. It's always said that North America has a free press and if you take that at its absolutely formal face value then you probably have to say "yes" nobody dictates that articles will be eliminated or that a certain topic will not be discussed in the newspapers in North America and don't forget that when I talk about North American newspapers by and large I'm talking about them prior to the 1960's when the word 'credibility gap' came into the English language or the phrase and a suspicion of what newspapers and television was telling you became much more current than it had been in the 50's. We lived in a cocoon of newspaper reporting that by and large controlled by the newspaper agencies, the reporting agencies, say the American Press and U.P.I which is the United Press International and those two news agency agencies by and large fed all of North America with its news and when I came away and lived in Britain for a while and started reading some of the both current and some of the retrospectives on events of the 50's from the vantage point of British newspapers, it became clear to me that the view I had had of North America and its place in the world, particularly post war and the development of American power post war and its place in its operation in the world was a very partial view after that time I decided that I simply would not read one nation's newspaper about itself and other people again. So I try and read at least two nations newspapers and the commitment to read newspapers and journals and to be generally well informed is something that I think has grown considerably since I have come to this country, and it is something that I continue. Not only in my interest in political topics by reading, or do I feed that interest by reading newspapers, I read a lot of history, I read a lot of... say the history of the post... post French revolution and when books of a political interest like "Citro" by William Shawcross or "The Final Days

by Woodward and Bernstein come along I make an effort to get a hold of those and read them, so I am interested, interested on a continuing basis in political life.

INTERVIEWER

Did you study a number of languages at school?

INTERVIEWER

I studied French, as I come from Quebec it was mandatory that we study French and I didn't use it much there because I lived in the English enclave in the town and I didn't have to use French but since I've come to Britain and travelled a lot in France I have sort of picked up my use of French and I now read it relatively fluently and I can speak it relatively fluently.

INTERVIEWER

How well informed do you think you are? You are from what you have just said presumably very well informed.

INTERVIEWER

I'm perfectly conscious of...

INTERVIEWER

Censorship

No not that, I'm conscious of the difficulty to intergrate what you read from day to day, the difficulty to spot longer term currents in political events which are masked by certain features and the concentration on the spectacular, which pervades most newspapers, drawing you away from long term and serious analysis of comment on bigger structural features in the economy and in the political arena. For example, take the entry of Britain into the Common Market, I read a fair amount of what was said about whether it would be good or bad for Britain to enter the common market, I don't think I read one really serious long term analysis of what the effects would be. There was a lot of journalistic junk surface effects about maybe this or that product or some sort of brush treatment. I might have found some of it in some of the political journals if I'd been able to locate them, but by and large I felt the level and the quality of discussion about such a major decision was paltry

and it was being dealt with at the level of hunches and hopes and that sort of thing, I'm always conscious of that, that the exposure I get to political events is much less analytic and much less at the level of structure than I would like. That's one of the reasons why I like Le Monde particularly because in Le Monde they will give long three and four part articles on a given topic, they will start back twenty years and tell you the political or the economic history of a given area over the last twenty years. They will not just tell you what today's Scribet of news is and maybe yesterday's and maybe the day before's. They are constantly updating your knowledge of not only just the current events, but the background to current events, that I appreciate and that is the one place I get it, that and buying books and reading political writings of a more serious kind. I would like to be better informed than I am, I would like simply to have more time to put the various views and the bits and pieces you get together so that you can form a more considered view about - Poland, or about Afghanistan, or about Guatamala or El Salvador, about the evolution of the Chilean government and the Argentinian governments. of the past three or four years.

- I mean I know, if you ask me a question about them I could give you my stock phrase, I could tell you a little bit more about it I could talk for five minutes, but I would love to know an awful lot more about some of those countries and their economic structure and development to know whether in fact, there is any chance that say, it or she will be actually eliminated or there will besome movement back to Christian Democracy or movement back to the socialist government of the Igandi period or whether that is a complete write off.

VIEWER

Socialist government of what period?

Igandi 1971 - 1973. That is just a hunch at the moment and I'd rather like to know more about it.

VIEWER

My last question is - I think when we were discussing violence on television you were going to add another point and I wonder if it has come back?

No I've lost it, we've gone on to other things and I've focused on other things.

VIEWER

Right thanks very much then Peter.

T R A N S C R I P T 16Interview with RobertPOLAND

Interviewer "O.K. then Robert , what do you think of the present situation in Poland?

Robert In what way?

Interviewer In any respect.

Robert I mean you want my honest response to that sort of question. I mean... there are just so many aspects to it. I don't really know where you would expect me to begin with a question like that. I mean Poland is... I have a lot of friends in Poland. I have visited Poland for my work and so I have obviously a lot of impressions about it. So what do you mean by the situation in Poland?

Interviewer Well, where would you personally start in order to answer that question?

Robert I wouldn't answer it at all.

Interviewer You wouldn't answer it at all?

Robert No, because I would like to know what you mean by the
'situation in Poland'

Interviewer Well, do you think it is a crisis situation between the Polish
people and the Russians?

Robert No. I don't think those categories have much to do with what
is going on. I mean, I'm still not sure what you're talking
about when you talk about the crisis situation between the
Polish people and the Russians.

Interviewer Well, quite a lot of people see that the Russians are a potential
threat to Poland.

Robert Umm.

Interviewer Would you say that?

Robert In what do you mean that? Do you mean military intervention
in Poland?

Interviewer I could mean that.

Robert Are you asking me whether I think that the Russians are likely
to intervene militarily in Poland? To use what Polish troops
are stationed within the Polish borders in order to, say, help
the regime crush the Solidarity trade union.

Interviewer Yes, but in actual fact all the questions will be general more than specific because I obviously want you to elaborate on your ideas on how you think the question should be answered.

Robert Well, generally I think I would respond that way by saying "well what do you mean then?"

Interviewer Well, obviously there is some situation going on in Poland at the moment. Have you got any feelings about it?

Robert Well, I have feelings about various things which are happening in Poland at the moment - yes. But, I would have to have a little bit more specific information about what you mean. I mean, that's like asking me what do I think about what is happening in Britain today! I mean lots of things are happening in Britain today. Lots of things are happening in America. I mean you have to be a bit more specific to have a sensible question.

Interviewer Just say politically.

Robert Well, again I mean that is such a huge question. I mean, I think you have to be a bit more specific to come up with an answer that makes any sense at all.

Interviewer The answer doesn't necessarily have to make sense actually, I'm interested in.....

Robert

Well my answers, I would hope would make some sense or else I wouldn't give them. I mean once again with a question like that, are you referring for example, to the position of the Polish party relative to the Polish people or are you talking about international relations - Polish government as opposed to its relations to the German Democratic Republic or to the Soviet Union, um.. or are you referring to the economic difficulties, I mean the fact that the people have to spend their lives waiting in bloody queues, I mean, what do you mean?

Interviewer

Well what I mean I....

Robert

I'm sorry to be difficult but this is the way I think.

Interviewer

All of the questions will be general because that's the whole idea of the experiment.

Robert

Then you're gonna have trouble.

Interviewer

Well, O.K. Well, look if you want to narrow it down. Say the position in Poland between the unions and the people if you like.

Robert

Well, again that's a difficult thing. Alright, there are two sets of trade unions in Poland. There are State trade unions and there are Solidarity trade unions. There are also various difficulties apparently within the Solidarity trade unions and it is an open question, the degree to which the Solidarity leadership um... as emerged out of the developments in Gdansk

last year still represent the feelings of the rank and file, um.. there is also a question of the extent... to what extent are you talking about, industrial trade unions or what's been happening in the land in Poland, I mean the fact that the farmers are organising what they call trade unions. um.. you see, I think it a very difficult thing to respond to. My feeling about the Solidarity thing, and I think that's what you're getting at, is yes I do think this is perhaps the best example, the only example we have of a genuine working-class movement in Europe. Um.. Yes, I do think that it is. Well, up until recently certainly a movement which has genuine working-class support. This is on the basis of what people from Poland with whom I have spoken tell me. And, I really can't do better than that because I haven't visited Poland during the last year. I spent most of this past Summer in the G.D.R. and so I have a lot of ideas about what is going on in Poland from the perspective of the G.D.R. and there things look quite different, um.. perhaps you really don't want me to go on talking about that.

Interviewer

No.. exactly..

Robert

Because that doesn't really answer the question.

Interviewer

You've said there are many aspects, what other aspects would you bring to bear then, in order to answer the question?

Robert

Well, again I'm still not sure what the question is. Um... There are various other things that it might have to do with.

This is why I've put it back to you, for example: it seems thoroughly obvious that the Polish economy is in a great deal of trouble, and it also seems fairly obvious that the strikes um.. and difficulties over the past year have not particularly helped the Polish economy to function better, right, and it seems to me that therefore there is at least, reason to doubt that the strikes are necessarily popular with all of the people. I mean I have friends in Gdansk who.. the woman had to give up her job in order to queue for food every day and I would be willing to bet that she's not all too terribly pleased with the situation and would not be surprised if she were to say: 'Well, one of the reasons for this is the bloody strikes all of the time'. I mean that's another aspect of the problem. I mean, there is this aspect that I have mentioned before. About, just what exactly is Solidarity and who is speaking for what and what is the relationship of the people in the various factories, and people on the land, um.. the people in various different regions and the National leadership and various different strands within the national leadership. I mean, is to answer, perhaps to, but to answer the question most generally, yes I'm concerned about it because I have friends there who I don't want to see get killed. O.K. I mean that perhaps is the only way that I think I can answer the thing generally.

Interviewer

Would you say it's anything to do with the historical development of Poland?

Peter Obviously yes.

Interviewer In what respect?

Peter Well what do you mean by the 'IT', the birth of Solidarity?

Interviewer Yes, if you like.

Peter I mean, do you want three hours on a lecture on the history of Poland?

Interviewer Not necessarily but if you want, if that's how you feel you can answer the question then...

Peter I don't really have enough time to spend the next three hours discussing the history of Poland. Um.. So I don't think I really want to go into that, unless you want to really spend the rest of the afternoon discussing Polish history.

Interviewer I mean, would you feel it important?

Peter Yes I don't think you can do it any other way.

Interviewer You can't outline it?

Peter It'll take a while. Alright, some of the things which to my mind have to be taken into consideration is: one, this is a nation which existed for well over a hundred years without a state, which I think is of absolutely crucial importance when

Understanding the thing. The state in Poland because of this experience is not what's defined a nation in any sense, the state doesn't necessarily have a legitimacy that it does in many other countries, that it probably does in Britain, that it definitely does in Germany both east and west, that it probably does in the United States, this is not true in Poland the Nation has not been defined by the state, the nation has to a very large degree been defined by religion, been defined by the church, been defined by its culture and this is something which is of absolutely crucial importance in understanding the weakness of the Polish state, because what we are seeing in Poland is to a very large degree a crisis of legitimacy of the Polish state, of the way people regard the Polish state and of the party, and there are other problems with the party, again I think you have to go back into the history of the Polish party and how it came to be um.. there are a number of problems in its development which make it at least to my mind, not seen as a legitimate authority in the country um.. the most obvious one is that they were all put in the saddle by the Russians after the war, and people recognised this um.. there is also I think an undercurrent of, if not anti-semitism, I mean there is a certain feeling that the party which was established in power after the second world war was somehow alien to Poland and a very large number of these people were Jews, a very large number of these people were people who had been outside of Poland's borders during the war um.. it came, the um.. Polish people's republic was established without the support, the Lublean government essentially came to power without the support of the mass of the population and what

happened during the late 1940's and the early 1950's in Poland is something again which hardly would help to buttress a sense of legitimacy, this Stalinist economic period and so forth, um.. the failures of 1956, the destruction in fact of the Polish October of '57, '58 until later 50's by Gromyko who was supposed to be this great hero, once again, I mean this was the great hope and that was destroyed um.... the destruction once again of these sorts of hopes in 1968 and again in 1970 and again in 1976, and the idea that in 1975 we have got someone who is willing to consult and look what they did! The fact that that throughout this development in the 1970's the economic boom essentially on borrowed money was accompanied by quite tremendous corruption. Um... So that in the mid-1970's, and I spent a fair amount of time in Poland in the mid-1970's, it was bloody obvious what people joined the party for, it was a.. perfectly obvious that they were just in it for the money um.. again it's hardly um.. well buttresses a sense of legitimacy, buttresses the Polish state and Polish authority, and what one sees in Poland today is to a very considerable degree a crisis of legitimacy um. there is no legitimate state or party authority in Poland, these guys are absolutely and utterly discredited there is virtually nobody in the whole Polish polit bureau who has any experience of government or economic management at all. Because everybody who has had experience of government and economic management has been booted out for good reason. I mean that's part of it but I.. O.K. so that's a very very brief outline. I'm sorry I went on so long.

Interviewer That's O.K. that's fine that's exactly what I want actually.
um.. Right to change the subject Robert .

Robert I think you do have to ask slightly more specific questions,
particularly, O.K. this is something .. it's not just a matter
of reading it in the papers for me, since I have spent some
time in Poland um.. and do actually feel to some extent
involved with this thing. I mean it's just too much ...

Interviewer You're emotionally involved with it obviously.

Robert Well yes that too, um.. but perhaps I'm a bit too close to it
to make any kind of sense out of that kind of a question which
I think can only be answered properly or acceptably on the
basis of umm a rather superficial reading of some things in
British newspapers. I think that's basically what you are
getting at isn't it?

Interviewer Not necessarily, I mean it depends on who I'm interviewing
actually, it changes from person to person, the sort of answer
I'm getting obviously to various topics, have you...

Robert And by the way, if you're concerned about the Russians to
come back to that. I don't really think the Russians want to
intervene. I don't think they will invade at all because they
are already there. I mean the whole idea of invasion is just
cold war....

Interviewer

Yes well I mean the sort of layman's impression is that big brother is going to come etc.,

Robert

What to take over 25 billion dollars worth of debts! I mean really they're not that stupid I don't think. The other thing I think I would just want to tack on to this is I think the developments in Poland um.. are in terms of the internal politics probably in the Soviet Union and definitely in the German Democratic Republic are a tremendous boon to the governments. Certainly in East Germany the developments in Poland have buttressed support by the people for the government because the last thing these people want is to have things turn out like Poland. To have that sort of a mess on their hands and people do say this and say this quite openly 'maybe the government wasn't quite so wrong in keeping their thumbs.. in keeping things firmly under control because when you strike, that is what happens'. So I don't think in any sense that the Polish developments either threaten or if you might say open a promise or de-stabilisation of their governments in the eastern bloc, I think, if anything, they're helping the more dictatorial reactionary repressive governments in eastern Europe tighten their hold on the populations with this support of those populations.

VIOLENCE ON TELEVISION

Interviewer O.K. then that's fine. Have you any views Robert, about violence in television programmes?

Robert I don't have a television and couldn't care less.

Interviewer You don't watch television at all?

Robert No.

Interviewer Do you go to films at all at the cinema?

Robert I used to before our daughter was born but since she has been born I haven't had a chance.

Interviewer At that particular time did you feel that films were violent?

Robert Not the ones that I went to see particularly.

Interviewer I mean you don't watch television at all?

Robert I don't have a television to watch.

Interviewer Oh I see, so you are not aware of the programmes that are on? I mean would you say for example that sports like karate or boxing are tantamount to fringe violence?

Robert

It's not something I particularly think about. I guess I would rather have them punching each other in a ring than starting wars. But that's the way I feel about Germans driving on an autobahn. I mean.....

Interviewer

You've not actually thought about that question at all.

Robert

No. It doesn't bother me..... really.

Interviewer

Have you thought how violence in families starts?

Robert

Ah.. Not in that sense no, would you be a bit more specific about what you mean?

Interviewer

Well, I suppose there's general feeling abroad that if.. there are quite a few violent programmes on television at this present time, for example like 'The Professionals' or 'Kojak', 'Starsky and Hutch'.

Robert

I have seen 'Kojak', I saw the German translation seven years ago.

Interviewer

'The Professionals' is pretty violent, pretty bloody actually in places um.. some sports like boxing and judo can be pretty violent and an inceasing number of children watch programmes these days and there is quite a bit of violence in families, and so I was just interested to see if you could see....

Robert Whether the media cause violence is that what you're saying?

Interviewer Media, does the media cause violence?

Robert No, I think that kids generally can tell the difference between real things and make-believe.

Interviewer Yes but um.

Robert I think that most children at a very early age are for example: able well.. that they don't relate sort of being shot dead and having to count to thirty as being the same as actually being involved in real violence. So that doesn't bother me all that terribly much. I don't think that that is where the problem of violence in the family in Britain....

Interviewer No but I mean, the news has been cast as being pretty violent in the last two or three months in so far as we have had violence in Toxteth in Liverpool and down in Brixton in London so wouldn't you say that there is more violence abroad these days?

Robert No.

Interviewer You wouldn't say so at all?

Robert Perhaps one thing you might be able to say is I think some people in some parts of people got the idea to make molotov cocktails when they were doing this thing from television, that

actually is something that can be traced, but No, I don't think things are more violent than they were.

Interviewer You just think it's probably..

Robert You open up newspapers, we.. I actually did this in my undergraduate days with 'The New York Times' sort of looking at various, just picking them out at random over the last hundred years and they are always saying how things are a lot more violent now than they used to be. Things are always more violent now than they used to be.

Interviewer Um. O.K.

Robert You shouldn't trust police statistics on crime either, they're all doctored. I mean, change the definition of crime and things look more violent, and what really is violence anyway?

BALLOONS -- SOLAR ENERGY

Interviewer True. At the end of August a fellow crossed the channel using a balloon as a form of transport, do you foresee solar energy, and ballooning in particular, as a possible mode of transport in the future?

Robert I wasn't here at the end of August, so I don't know anything about balloons going over the channel. I was in East German. Yeh, I suppose so.

Interviewer Um.. solar energy has been used in solar heating projects, particularly up here, do you see that as a cost effective means of heating?

Robert In Arizona.

Interviewer Yes, not particularly in Britain?

Robert I don't know, I mean, I don't know the economics of the thing.

Interviewer No? You've never sort of... have you gone up to Milton Keynes and looked at the sort of projects which are going on up there?

Robert No.

Interviewer It's a subject that doesn't particularly interest you?

Robert I don't know, Milton Keynes is just a place to drive through as quickly as possible, I don't..we stop, we sometimes shop in the new city but we don't pay any attention to the things in Milton Keynes.

Interviewer You haven't thought about the use of solar energy in any scheme.

Robert No.

Interviewer No? You haven't got any view point on it at all?

Robert There's no way that I could put it or build it into our house. We wouldn't have the money to do it anyway. No, I'm afraid not.

DEVELOPMENT OF THE THIRD WORLD

Interviewer O.K. Um.. that's all right. Have you got any ideas then on the development of the third world politically and economically.

Robert That's another question you are gonna have to be a bit more specific about I'm afraid. (Laughter) Sorry about this.

Interviewer Well, I've said politically and economically, so I suppose you could take two aspects.

Robert Well, the last time you asked me a question about sort of the general state of affairs with thirty five million people, and I thought that was a bit too general. This time you're trying three billion. I mean what countries do you mean, and what sort of political problems, and what sort of economic problems?

Interviewer Well any. I've tailored the questions to be general in so far as other people have only thought in very general ways about the development of the third world, and therefore couldn't talk at length unless the question was pretty general um...

Robert Well, I do think it's a meaningless question as it stands.

Interviewer Well, for example, take agriculture if you want - if you know anything about that.

Robert But again - what about it?

Interviewer Well, you tell me I mean which aspect.

Robert I'm sorry but that is just a meaningless question and there is nothing to answer - and I'm not just being stroppy or anything like that. There is nothing to answer.

Interviewer Would you say that has got to develop agriculture in the third world or not?

Robert Yes obviously, because most people who have some sort of employment are employed in the agricultural sector so obviously yes.

Interviewer Would you say you've got to change the politics of the countries involved?

Robert

Well, what countries? What politics?

Interviewer

You tell me. I'm just throwing out a question.

Robert

I mean... I think you do have to be quite specific about this. I mean, alright a friend of mine was involved in a project about agricultural patterns of land holding and farming in Bihar province - Bihar state in India. And yes there, following the findings of his study, yes there do have to be political changes in order to effect proper sort of changes in patterns of land holdings, because of the nature of (This was in the early 1970's. It may have changed since then.), because of the nature of the congress political machine in the countryside, that for whatever rhetoric that might have been going on up above the level of Ghandi's politics etc. at the village level. It was the big land owners that ran this thing, and until something was done about that, no matter what the national policies are, very little is going to be changed. In that particular instance, with those particular crops, in that particular climate, with that particular policy - alright yes I would agree with that, but I mean you don't want me to, to... to start discussing things in those terms about every country from China to Angola to Paraguay to Burma.

Interviewer

No, you can pick one as an example if you wish.

Robert

An example of what?

Interviewer Well, I've said the development of agriculture.

Robert But they're very ver... You're saying... you're talking about the political structures in which a development - a proper development of agriculture could take place, and there are very different sorts of political structures in the so called third world, and implicit in your question is that somehow all these poor people out there are stuck under the same kind of political system, which isn't the case.

Interviewer No, no, no.

Robert Right, so there are about a hundred different questions wrapped up in that one.

Interviewer Yes, such as?

Robert Well I mean.. such as what it looks like in Bihar province and what it looks like in Angola, or parts of Angola or what it looks in parts of China where they have a very different sort of political structure, a very different pattern of land holding, different crops, different political system, alright.

HUNGER STRIKES

Interviewer O.K. thanks then Robert . Right then Robert , you know about the hunger strikers on strike in Maze prison at the

moment. I expect you've read about them in the news. Do you think these people should be given political status?

Robert No.

Interviewer Can you say why?

Robert Um.. Well, there are a couple of reasons. One: they don't say that they are asking for it, so it therefore formally isn't on offer. It isn't something that is being negotiated for in any case. So that in that sense is just a non-issue. The second thing about it is. I do think it's impossible for a state to concede um that some criminal acts are committed for political reasons while others are not. I mean, regardless of whether or not that is the case. Um.. I don't think that the British state is in a position to do that kind of thing. So I just don't think it's on - full stop.

Interviewer O.K. You've got no other thoughts about the hunger strikers?

Robert Well, yeah there are lots of thoughts. What kind of thoughts do you mean?

Interviewer Well, what thoughts come to your mind, or spring to mind immediately?

Robert You will have to direct me a little bit more than that I'm afraid.

Interviewer Um.. Well, do you see the hunger strikers as people, obviously they are fighting for political status although that is more or

less what they are doing for their cause or would you say they are prisoners of conscience?

Robert

Well, probably they'd say they were prisoners of conscience, I don't think they're prisoners of conscience.

Interviewer

At all - they're just terrorists?

Robert

What do you mean 'just terrorists'? Anybody with any thoughts for anything is a so called terrorist. I mean, you know half the people who are Heads of various different states around have done things which can be called terrorist. The object... the function of anybody who serves in any army is to kill people you know, that's just what it's about. What do you mean by terrorist anyway?

Interviewer

Well I'm just throwing it out as something else for you to perhaps discuss, but if you don't feel strongly about it.....

Robert

Well I think that in a sense the people who are starving themselves to death are victims of the whole thing, I mean nobody really wants to see them live, right - apart from their families. The British Government wants them dead, the majority community in Northern Ireland wants them dead; the organisation to which they have been a part of wants them dead. Nobody gives a shit about them basically. They're just being used - by all sides. I mean, this government is trying to make political capital out of them to show how tough they can be. Um.. Then the people in the Protestant community in

Northern Ireland are just thinking you know... 'Oh great, just wait thirty six more months and we'll be rid of the lot of them if we go off at this rate'. And particularly the I.R.A. are making, and quite successfully so, are making political capital out of this, and where this is going to lead for both communities in Northern Ireland is just a worse mess than they have got already. Um.. The people concerned are just being, willingly perhaps, being used and being screwed.

HOBBIES

Interviewer

Um.. Right, to change the subject totally - do you have any hobbies or pastimes which you indulge in outside of the Open University?

Robert

Um.. I haven't actually been involved in too terribly much over the past year or so since my daughter has been born. We used to do lots of things like walking and climbing and various sundry things like this. We like to travel quite a bit my wife and I, but since the birth of our little girl um.. a lot of that has fallen by the wayside. So, I mean except for mucking around with the garden and walks and things of that sort, not really, no.

Interviewer But what was your main sort of hobby - mountaineering?

Robert Not really mountaineering, we used to do a lot of sort of mountain climbing things like that, years ago before we got old and decrepit and parental and things.

Interviewer Yes, so are there pastimes which you enjoy doing now that you have a daughter?

Robert Oh yes, I enjoy playing with my daughter a lot, I waste an awful lot of..... spend a lot of time I should say, doing that.

Interviewer Yes, anything else?

Robert Not that I can think of. And that's the object of the game, what I can think of isn't it.

ADVICE TO SOMEONE

GETTING MARRIED

Interviewer (Laughing) Right have you got any advice for someone getting married?

Robert Depends on who, it depends on who.

Interviewer I mean can you give me examples from people you know - your friends?

Robert What about - advice that I would have given or have given about whether or not they ought to get married?

Interviewer Well, in some cases would have given but did not give. Or in other cases perhaps have given but might have regretted.

Robert I've never given any advice to people about whether or not they ought to get married and I hope I never will. I think that is just a disaster area to keep away from.

Interviewer But do you believe in marriage as an institution?

Robert How do you believe in something as an institution?

Interviewer Well.. You say you are married.

Robert I am married yes, and we had to get married otherwise my wife wouldn't have been allowed into Britain.

Interviewer Oh I see, so there was a reason for it.

Robert Well that was the reason why we did it at that time, I think we probably would have done it in any case at some point because we rather liked the idea and we enjoyed getting married actually as well, it was rather fun although we lived together for quite a while before hand. We had to do it when we did it so that my wife could come and get an entry permit to come into Britain.

Interviewer So there was a reason for that. I mean I was going to next say would you advocate living with someone for the rest of your life and bring up children in that environment.

Robert I would neither advocate nor not advocate it. That is up to other people and I couldn't generalise about that. It depends on the people involved and their circumstances and so forth.

MY-JOB

Interviewer Right. Can you outline a little bit of what you think your job here entails?

Robert Causing trouble (Laughter) in a sense I'm serious about that, I did see it as trying to stir things up a bit and trying to take a look at things from a rather different angle. Now that being said I mean... I am half serious about that one. It's more... I mean teaching in a university in general or more specifically do you mean being a lecturer in history at the Open University and what tasks I have to perform?

Interviewer Yes, more or less specifically yes.

Robert I think I want to say are general things to begin with. I think that the purpose of teaching - I'm not sure what teaching means, I really don't know how you teach things and I don't know how people learn things. I don't think that very many

people do and I think that characters or institutes or institutions that try to quantify this in some way are just talking a lot of nonsense because people don't really know what these terms mean. So I use them very carefully, but I think that probably what I am trying to do when teaching history is in a sense teaching people how to read and that's all. Um.. O.K. so that's the very general thing, specifically about the Open University alright - I write units, I help administer courses, I sit on exam boards, um. I head a research group, I am involved in making proposals for new courses. An important part of the idea in fact is thinking up new ideas of how we might do this that or the other thing. I teach at summer school I do a great number of day schools partly in order to give them the benefit of my presence and partly to just find out what's in fact going on with courses because not enough central academics know very much about how the courses they produce actually get taught. I do a very considerable amount of research both within the context of this research group that I am heading and outside it, and I consider that also as part of my O.U. work because I think that it's important that the various disciplines, in my case the history discipline, develop for itself a profile, a research profile which is recognised outside the university, so they say: 'Ah history at the O.U. they're doing X.Y.Z.', and maybe make a name for ourselves. Being able to comment upon the work of colleagues particular things which other people write for courses with which I am associated. Pulling my weight as far as I can with the various administrative tasks I'm given within the faculty and outside of it. I think that's roughly what it

is. I can't remember precisely terms and conditions but I think that is about as close as you'd get.

TOPICS IN THE NEWS

Interviewer Um. Reverting back to topics in the news or topics in the newspapers how interested would you say that you are in those particular topics or any topic?

Robert Generally topics in the news I think I am quite interested in..

Interviewer You are quite interested in and would you say that you are quite well informed?

Robert Fairly well informed.

Interviewer O.K. Robert . thanks very much.
